

How's business? It's slogging up hill

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BUSINESS WEEK

A MCGRAW-HILL PUBLICATION

FIFTY CENTS

JULY 23, 1960

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lots of good things come from

GOOD YEAR

CHEMICAL DIVISION

Plioflex, Pliolite, Wing-Stay — T. M.'s The Goodyear Tire & Rubber Company, Akron, Ohio

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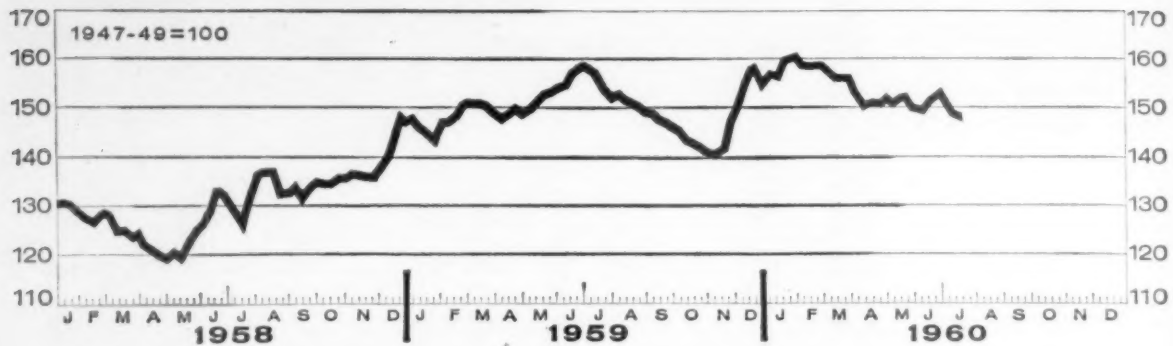
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NUMBER 1612

FIGURES of the WEEK



BUSINESS WEEK INDEX (chart)

1953-55 Average	Year Ago	Month Ago	Week Ago	\$ Latest Week
133.3	154.2	152.8	149.3r	148.9*

PRODUCTION

Steel ingot (thous. of tons).....	2,032	365	1,739	1,476r	1,556
Automobiles.....	125,553	127,502	137,641	89,769r	104,711
Engineering const. awards (Eng. News-Rec. 4-wk. daily av. in thous.).....	\$52,412	\$93,512	\$94,408	\$98,451	\$101,135
Electric power (millions of kilowatt-hours).....	10,819	13,415	14,053	13,031	14,208
Crude oil and condensate (daily av., thous. of bbl.).....	6,536	6,858	6,840	6,831	6,832
Bituminous coal (daily av., thous. of tons).....	1,455	864	1,467	1,855r	744
Paperboard (tons).....	247,488	274,741	317,358	174,810	272,867

TRADE

Carloadings: mfrs., miscellaneous and L&I. (daily av., thous. of cars).....	70	58	60	62	61
Carloadings: all others (daily av., thous. of cars).....	47	37	48	37	40
Department store sales index (1947-49 = 100, not seasonally adjusted).....	121	126	144	126r	109
Business failures (Dun & Bradstreet, number).....	198	242	353	271	258

PRICES

Industrial raw materials, daily index (BLS, 1947-49 = 100).....	89.2	92.0	91.5	90.9	91.1
Foodstuffs, daily index (BLS, 1947-49 = 100).....	90.5	79.3	77.1	78.3	78.8
Print cloth (spot and nearby, yd.).....	19.8¢	19.5¢	21.2¢	21.0¢	20.6¢
Finished steel, index (BLS, 1947-49 = 100).....	143.9	186.7	186.6	186.2r	186.2
Scrap steel composite (Iron Age, ton).....	\$36.10	\$39.50	\$31.00	\$31.17	\$31.50
Copper (electrolytic, delivered price, E&MJ, lb.).....	32.39¢	29.89¢	33.00¢	33.00¢	33.00¢
Aluminum, primary pig (U. S. del., E&MJ, lb.).....	20.6¢	24.7¢	26.0¢	26.0¢	26.0¢
Aluminum, secondary alloy #380, 1% zinc (U. S. del., E&MJ, lb.).....	††	23.78¢	24.07¢	24.03¢	24.00¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.34	\$1.92	\$1.99	\$1.89	\$1.89
Cotton, daily price (middling, 1 in., 14 designated markets, lb.).....	34.57¢	33.50¢	32.25¢	32.20¢	31.98¢
Wool tops (Boston, lb.).....	\$1.96	\$1.88	\$1.68	\$1.67	\$1.67

FINANCE

500 stocks composite, price index (S&P's, 1941-43 = 10).....	31.64	59.31	57.30	56.77	55.64
Medium grade corporate bond yield (Baa issues, Moody's).....	3.59%	5.09%	5.27%	5.27%	5.23%
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate).....	2-2½%	4%	3½%	3½%	3½%

BANKING (Millions of Dollars)

Demand deposits adjusted, reporting member banks.....	††	61,199	59,784	57,646	58,440
Total loans and investments, reporting member banks.....	††	105,457	104,213	103,282	105,547
Commercial, industrial, and agricultural loans, reporting member banks....	††	29,394	32,465	32,403	32,339
U. S. gov't guaranteed obligations held, reporting member banks.....	††	31,502	25,750	25,266	27,453
Total federal reserve credit outstanding.....	26,424	28,462	27,609	28,063	28,120

MONTHLY FIGURES OF THE WEEK

	1953-55 Average	Year Ago	Month Ago	Latest Month
Personal income (seasonally adjusted, in billions).....June.....	\$296.1	\$386.8	\$404.7	\$405.8
Farm income (seasonally adjusted, in billions).....June.....	\$16.0	\$16.8	\$16.4	\$15.8
Bank debits (in billions).....June.....	\$118.1	\$228.6	\$232.8	\$250.8
Wholesale prices (U. S. Dept. of Labor BLS, 1947-49 = 100).....June.....	110.4	119.5	119.7	119.7

* Preliminary, week ended July 16, 1960.
†† Not available. Series revised.

r Revised.
Date for 'Latest Week' on each series on request.

THE PICTURES—Shel Hershorn; 29—Herb Kratoch; 32, 33, 34—Jim Mahan; 48-49—Ron Appelbe; 63—Willys Motors; 64—(left) Minneapolis-Honeywell, (right) Ted Polubbaum; 90-91—McGraw-Hill World News; 104-105—(right) Shel Hershorn, (left top) US Navy, (left mid.) Shel Hershorn, (left bot.) Joan Sydlow.

SHORT STORY ABOUT LONG DISTANCE



♣ *Been in town two hours ... haven't even seen him yet ... can't make money this way!*



Boy—am I a chump ... for not calling ahead ... by Long Distance!”

BELL TELEPHONE SYSTEM

Long Distance pays off! Use it now ... for all it's worth!



ROCKWELL-STANDARD... Growth through leadership



Rockwell-Standard know-how goes globe-girdling

Rockwell-Standard's international operations are advancing in seven-league boots. Three times the volume in 1959 of any previous year. And the prospects for further foreign growth are tremendous.

Two major considerations provide the urge to increase our international business. First—to close the gap of distance between our U. S. plants and the foreign plants of our important domestic customers—in a word, to manufacture our products where our customers need them. Second—to expand our profit potential by putting our 50 years of experience to work where it has a definite, tangible market value.

The increasing need for our products and experience in the vast foreign development of the automotive and

allied industries is exemplified by our recent joint venture with Cobrasma in Brazil. Cobrasma-Rockwell's \$11,000,000 plant in Sao Paulo has 250,000 square feet of floor space with an annual capacity of 72,000 sets of automotive vehicle front and rear axles. It is Latin America's largest independent automotive parts plant, and will contribute substantially to the development of Brazilia, Brazil's new billion dollar capital city.

Our foreign operations now include Canada, Switzerland, Brazil, Germany, India and Great Britain.

Further U. S. and world development and diversification is a planned objective of this business. Rockwell-Standard is the world's largest manufacturer of axles for trucks, buses and trailers.

This is one of a series of statements to acquaint you with the broad scope of the activities of Rockwell-Standard Corporation.

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22 U. S. plants of Rockwell-Standard Corporation manufacture these famous products • TIMKEN-DETROIT® AXLES • HYDRA-DRIVE® TRANSMISSIONS • GARY® GRATING • BLOOD BROTHERS® UNIVERSAL JOINTS • BOSSERT® STAMPINGS • AERO COMMANDER® and COMMANDER ALTI-CRUISER® AIRCRAFT • AIR-MAZE® FILTERS • KERRIGAN® LIGHTING STANDARDS. Plus these other Rockwell-Standard® products: AUTOMOTIVE BUMPERS • AUTOMOTIVE SEATING • LEAF AND COIL SPRINGS • BRAKES • FORGINGS

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BUSINESS WEEK • July 23, 1960

READERS REPORT

New Spinning Method

Dear Sir:

Your article on Textile Machinery, the Improvements Come Slowly [BW—Jun.4'60,p88] was excellent and of unusual interest. Interesting because we are in the textile business and because you reported the new improvements. Also you recognize the past progress and the physical limits on further progress. Few observers realize the truth of your statement "It has been mechanized far longer than any other manufacturing business." The textile industry is probably the oldest of all.

Although we are not machinery producers, our Research and Development Department has added its share in improvements. . . .

You point out accurately one of the limitations on continued improvements is the physical limit of 7,200 ft. per minute of traveler speed in conventional ring spinning. The most recent patent of our company features new developments in ringless spinning with equivalent traveler speeds of 27,500 ft. per minute or 10,500 turns of twist per minute on very coarse counts. This method also provides spinning and winding or spooling in one operation. . . .

LEM COLEY

THE RUSSELL MFG. CO.

ALEXANDER CITY, ALA.

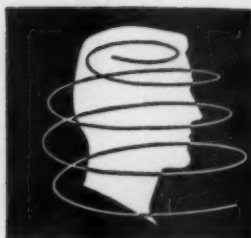
Railroad Pay Pattern

Dear Sir:

BUSINESS WEEK's usually fine and accurate reporting slipped slightly to include some unfortunate errors in an article [BW—Jun.11'60,p79]. . . . I refer to an article concerning the unfolding railroad pay settlement pattern where (on page 80) "insiders" are reported as pointing out that the railroad industry (1) will not press the effort to eliminate featherbedding work rules from present labor contracts until after this fall's elections—"if ever," and (2) has quietly dropped its "massive" public relations program on the issue.

These statements are wholly in error. For the record, I would like to state emphatically that the railroads intend to push with undiminished determination for the earliest possible relief from the \$500-million in annual waste arising from present outmoded work practices. . . .

Meanwhile, we would also like



KEYSTONE WIRE
a tool for
man's imagination

**complete
confidence**

because
PIONEER
stayed with
QUALITY!



Junior knows that on skates he can beat anybody on the block. To be the champ takes muscle, coordination—and good skates. For example, his wheels spin on mirror-smooth and bright steel bearing balls made from Keystone Wire. Held to approved engineering standards of structure and crushing strength, each ball has the stamina for long wear. Size tolerance, sphericity, hardness—all contribute to smooth rolling action.

Pioneer Steel Ball Company, Inc., Unionville, Conn., makes these quality balls . . . we make the wire which meets their high standards of quality.

Pioneer specifies Keystone "XL" Ball Quality Wire for the majority of its cold heading jobs, and from it, produces first quality balls in a wide range of sizes at rates of thousands per minute. Keystone "XL" Ball Quality Wire delivers the most *consistent flowability* and hardening properties for manufacture of quality balls. Why? Two answers: steel quality and wire drawing technique. Consistent wire characteristics are the result . . . fine grain, correct response to heat treatment, uniform diameters, exterior softness and relative freedom from pipes, seams and kinks.

It pays to build a quality product. Consult with your Keystone Representative for possible improvement of your product through imaginative application of wire with superior characteristics.



Keystone Steel & Wire Company, Peoria 7, Illinois

KEYSTONE
WIRE FOR INDUSTRY

to make it emphatically clear that our public information activities have NOT been "quietly dropped." We will continue, as we have right along, to keep the public fully informed. . . .

J. HANDLY WRIGHT
VICE-PRESIDENT
ASSN. OF AMERICAN
RAILROADS
WASHINGTON, D. C.

"Legally Speaking . . ."

Dear Sir:

Nice going in the article in *In Marketing* [BW—Jun. 18'60, p152], concerning Jess M. Ritchie, president of Pioneers, Inc., Battery AD-X2, and the FTC. However, we find the following in error:

"FTC finally decided in 1956 to drop charges of false advertising. . . ."

Legally speaking, this is incorrect. The FTC charged Pioneers, Inc. in March of 1954 and, after 103 sessions of hearings in 11 states and 13 cities from Oakland, California to Boston, Mass., dismissed the charges of false and misleading advertising. . . . Legally speaking, there is a vast difference between "dropping charges" and going to trial and rendering a decision dismissing the complaint.

It is interesting to note that in the first instance the FTC could not find dissatisfied customers and in the latest charges, the FTC does not question the efficacy of Battery AD-X2.

JESS M. RITCHIE
PRESIDENT
PIONEERS, INC.
OAKLAND, CALIF.

"Tailspinned"?

Dear Sir:

Re [BW—Jun. 18'60, p131].

"When prices tailspinned," I goed out and buyed some bonds.

Please——! Tailspin is a noun. But if you must abet the bastardization of the language, let's do it with some consistency and use the accepted verb form, spun.

CLARENCE W. METCALF
ENGINEERED ADVERTISING
SHARON, MASS.

"Avaricious"?

Dear Sir:

Re: [BW—Jun. 18'60, p173].

"Avaricious reader"—hates to put out money for his reading matter, huh? Or do you mean what you think you mean?

R. W. SHORTRIDGE
PRAIRIE VILLAGE, KANS.

America's modern way of doing business



Stabilizing rocket — delivered by AIR EXPRESS — gets high-temperature environmental test at California laboratory

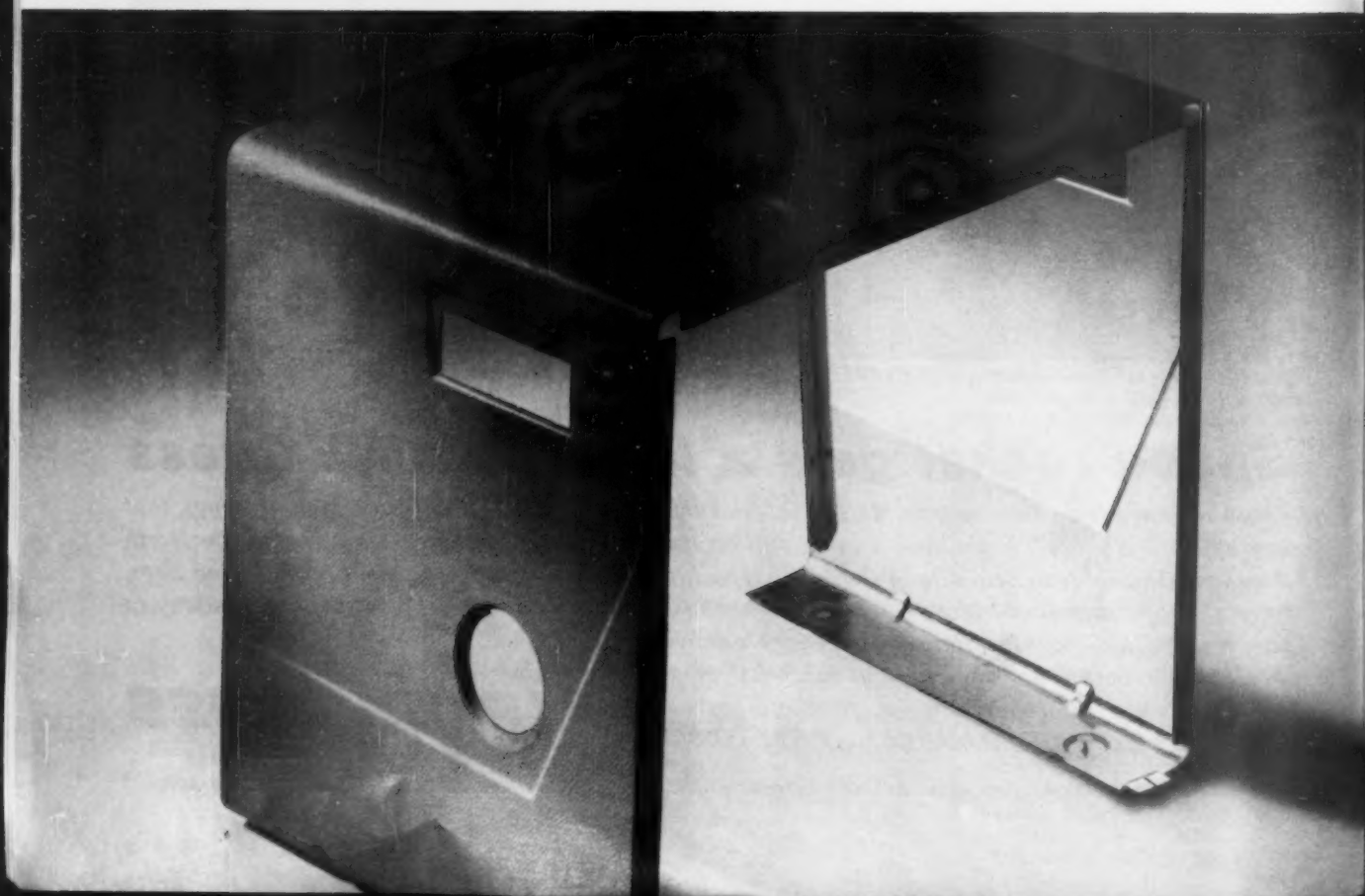
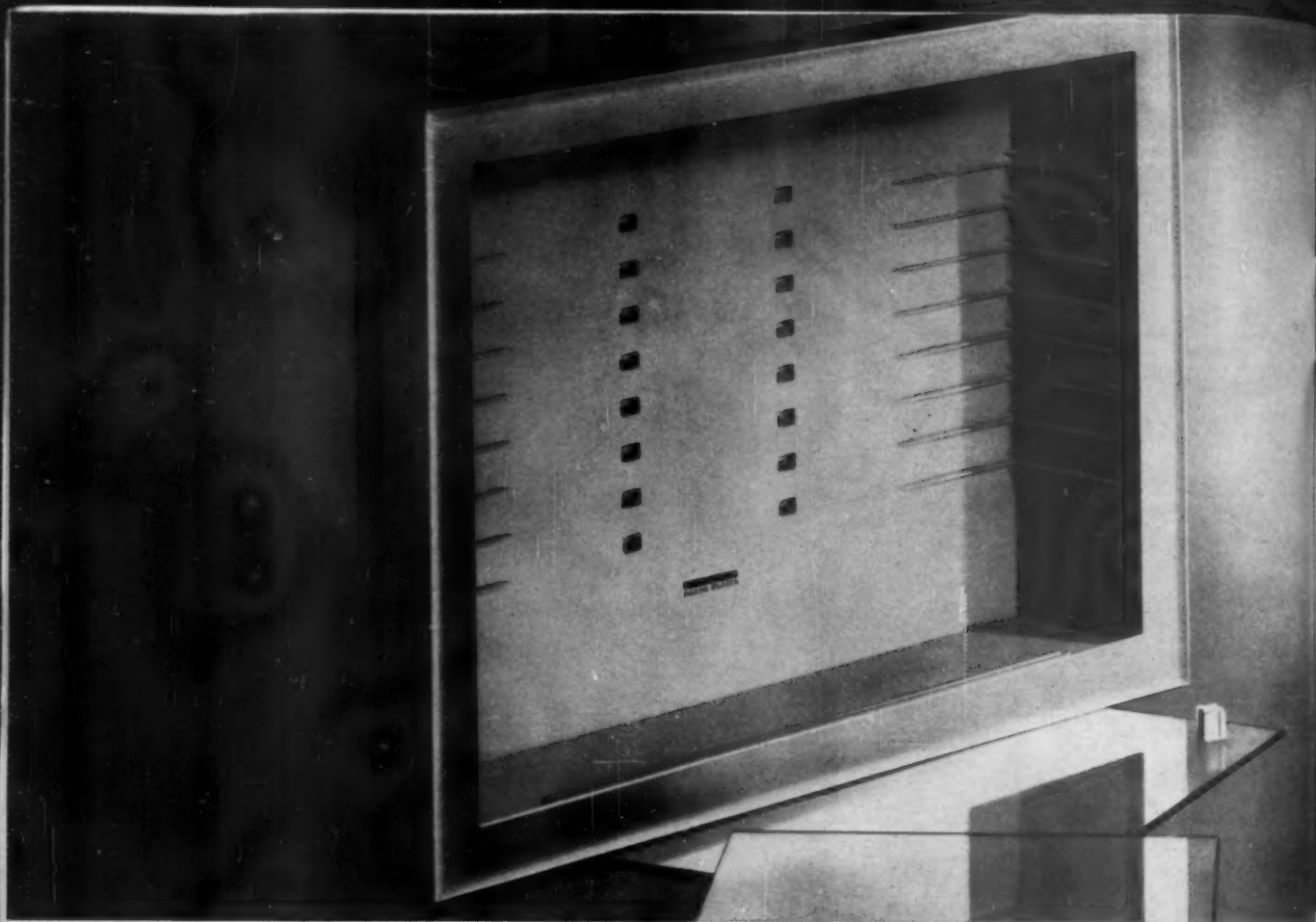
Space rocket gets a lift from Air Express

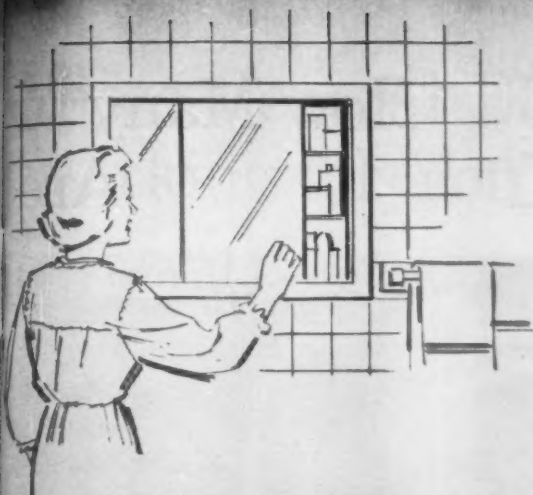
These men aren't on their way to Mars—yet. But the amazing rocket they're perfecting brings that day closer and closer. Right now, they're putting its components through their paces at the North American-Rocketdyne field site in California. The little stabilizing rockets, about to be tested here, have already flown successfully—by AIR EXPRESS . . . the world's fastest, most dependable way to ship. If speed, kid-glove handling and dependable delivery — all at low cost — are vital to your business, always call AIR EXPRESS. And make sure your products, parts and new models are **FIRST TO MARKET...FIRST TO SELL.**

 **AIR EXPRESS** 

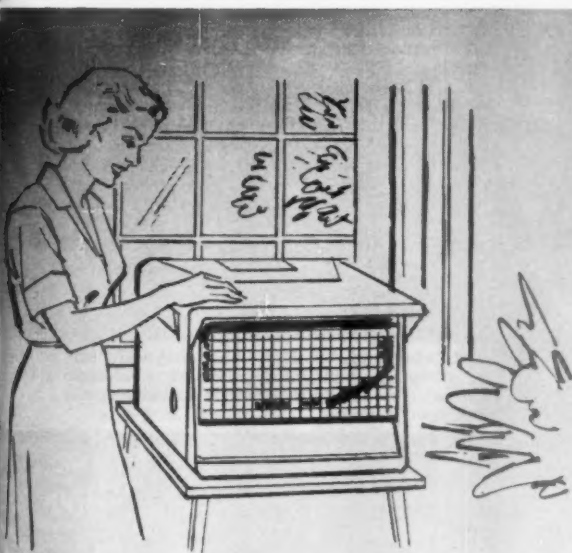


CALL AIR EXPRESS DIVISION OF RAILWAY EXPRESS AGENCY • GETS THERE FIRST VIA U. S. SCHEDULED AIRLINES





MOLDED... This attractively functional medicine cabinet plays a part in a leading builder's program to construct quality homes that require minimum care. The cabinet—including shelf supports and grooves for sliding mirror-door—is custom-molded in one piece of Lustrex® styrene. It has no seams or joints. The color is already molded in and permanent. This cabinet won't rust, corrode, stain, or discolor. Its hard smooth surface wipes clean with a damp cloth.



OR FABRICATED... This handsome streamlined air-cooler cabinet was "finished" before it was started! Stamped out of vinyl-fused-on-metal, then formed, it required little or no finishing, since it already had a tough, colorful finish, grained and embossed, that was washable with soap and water, and unusually resistant to abrasion, acids, and alkalis.

PLASTICS CAN WORK WONDERS FOR YOUR P & L

Plastics can lower manufacturing costs, improve product performance, increase consumer acceptance. Some times one or another; many times, all profit-making three!

Custom-molding the medicine cabinet is a case in point. It eliminates the need and cost of multiple parts. It assures close tolerances with minimum finishing. Molded-in colors eliminate expensive enamel spraying and baking. It mass-produces "quality" at low cost.

The air-cooler capitalizes on the decorative and protective qualities of plastics, the strength of metals, and the fabricating short cuts of vinyl-on-metal. Chairs, desks, luggage, walls, and partitions are some of the many other products now being made of this versatile new material.

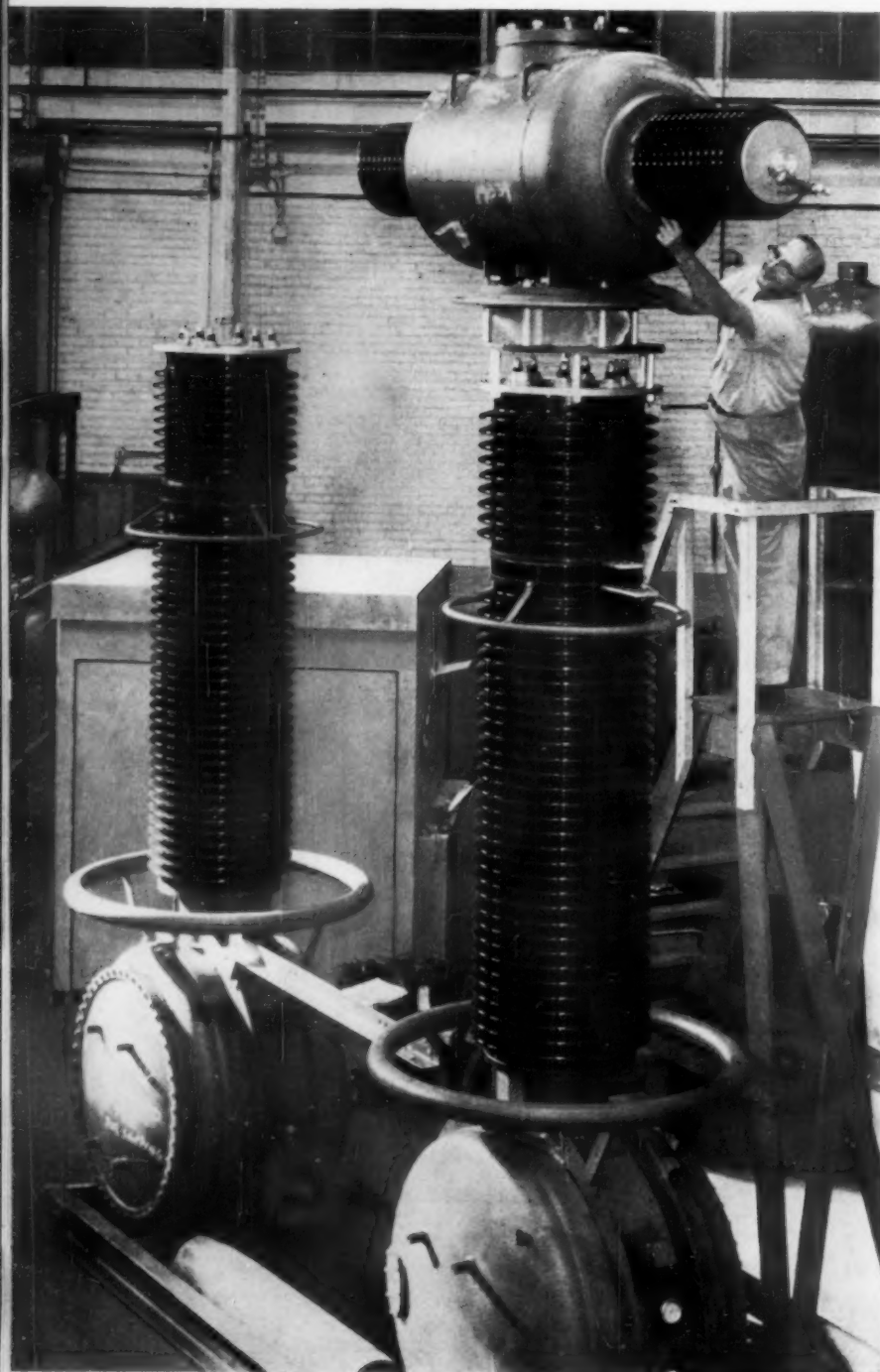
New and improved families of plastics are making profitable things happen in many manufacturing fields. Let two new Monsanto booklets bring you up-to-date. Write for your free copies of "How To Buy Custom Molded Plastics," and "Vinyl-on-Metal," to Monsanto Chemical Company, Plastics Division, Room 765, Springfield 2, Mass.

Monsanto does not make finished plastic products. For leading molders, extruders, and fabricators, who make these products, Monsanto has developed a broad range of Lustrex styrene, Monsanto Polyethylene, and Opalon® vinyl compounds.



MONSANTO ACTIVATOR IN **PLASTICS**

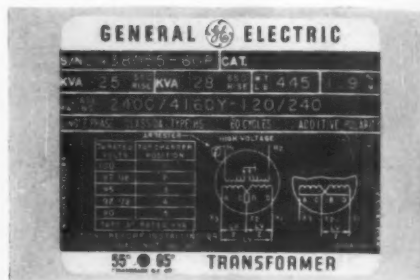
QUESTION TO MANAGEMENT:



ADDED VALUE: General Electric's ATB Air-Blast circuit breakers are easy to install and maintain, and provide practical protection for transmission systems from 115 through 460 kilovolts and beyond. General Electric's technical leadership in building Air-Blast breakers helps to assure utilities of superior system protection.

GENERAL  **ELECTRIC**

How Many of These Are Worth



ADDED VALUE: Permalex® insulation in new dual-kva distribution, network and medium transformers allows a 12% increase in kva capacity.



ADDED VALUE: Proved performance of magnetic suspension meters: of nearly 12 million in service, not one has been replaced because of bearing wear.



ADDED VALUE: New Kinatrol® eddy current coupling is a packaged all-electric drive offering low cost, adjustable-speed performance.



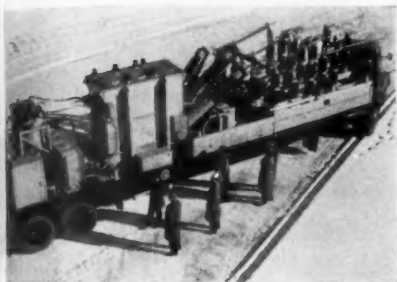
ADDED VALUE: Major design innovations in the new draw-out Limitamp® Motor Control assure purchasers of faster installations and easier maintenance.

*Trade-Mark of General Electric Co.

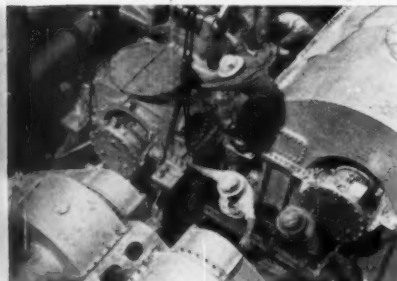
These General Electric **ADDED VALUES** Working for You Today?



ADDED VALUE: New compact capacitor equipments using the lightest, smallest 50-kvar capacitors available reduce installation costs.



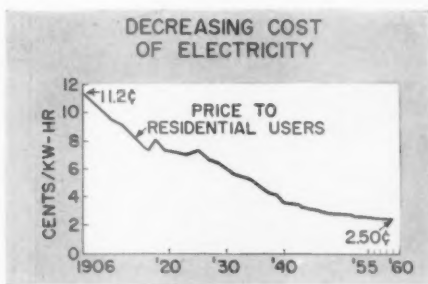
ADDED VALUE: Progress in design, materials and manufacturing increased mobile substation ratings from 5,000 to 17,000 kva in 10 years.



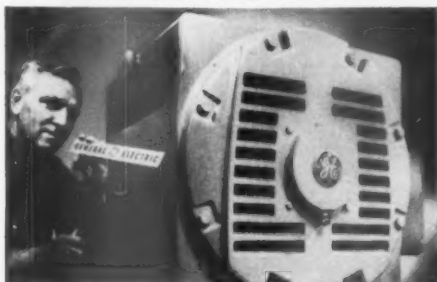
ADDED VALUE: G.E. has developed marine propulsion units with gears much lighter and stronger than World War II designs.



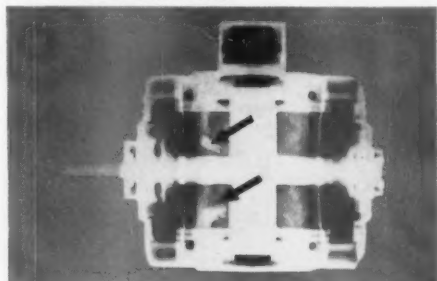
ADDED VALUE: Recently announced U25B diesel-electric develops more horsepower per axle than any comparable locomotive.



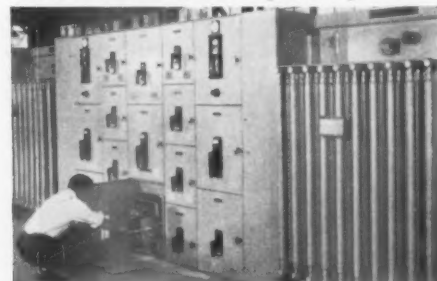
ADDED VALUE: Improved steam turbine generator efficiency—producing more power with less fuel—helps utility companies keep the cost of electricity low, despite inflation.



ADDED VALUE: New Custom "8000"* motors provide users with faster installation, easier maintenance, more rugged construction and increased insulation life.



ADDED VALUE: New Thermo-Tector System (x-ray photo) in General Electric Tri-Clad 55 R motors eliminates overload winding burnouts, allows maximum motor output safely.



ADDED VALUE: Selectively-coordinated load centers deliver maximum power continuity (since power is removed only from faulted feeders), at lower cost than ever before.



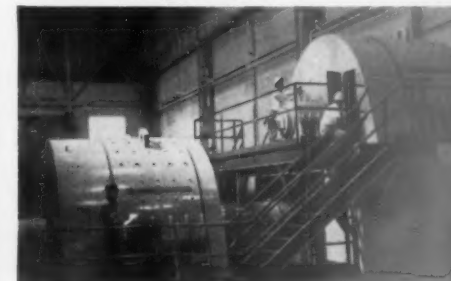
ADDED VALUE: Automatic Dispatching System typifies General Electric's progress in designing equipments that serve loads more efficiently.



ADDED VALUE: Advanced engineering produces safer equipment to use, and results in unique refinements such as Vertical Lift Metal-clad switchgear.



ADDED VALUE: New silicon controlled rectifiers make possible maximum reliability and speed of response in machine-drive systems.



ADDED VALUE: "TOP-FORWARD" d-c twin drive with many new motor design innovations, saves space, reduces costly downtime.

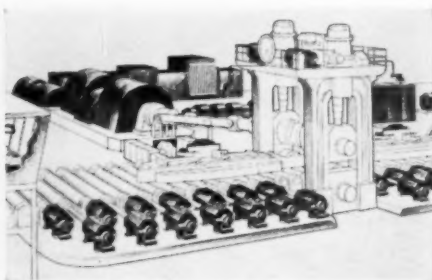
GENERAL  ELECTRIC

TO HELP YOU CAPITALIZE
ON BUSINESS OPPORTUNITIES
OF THE SIXTIES . . .

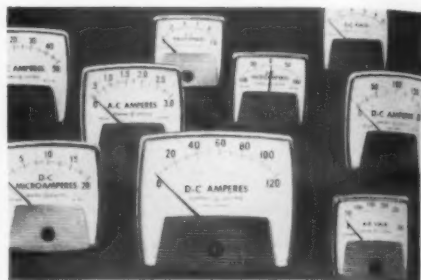
General Electric
Are Committed



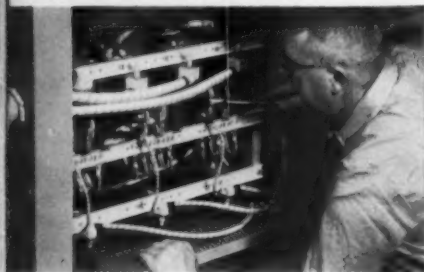
ADDED VALUE: G-E Numerical Control applied to this 100-ton rotary-turret punch press accounted for a time reduction of 6-to-1.



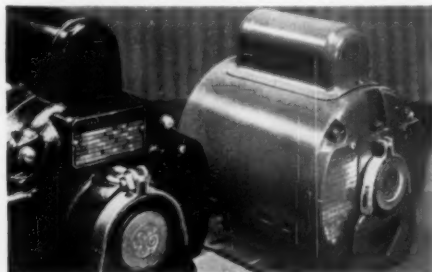
ADDED VALUE: Innovations and systems technology have made G.E. a leader in field of rolling-mill automation. Above: G.E.'s version of completely automated reversing hot mill.



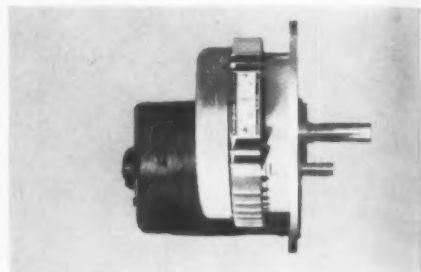
ADDED VALUE: BIG LOOK AC and DC panel meters feature distinctive appearance, greater readability and extra-long operating life.



ADDED VALUE: The new QHT* (Quiet-High-Temperature) dry-type transformers are—easy to install, smaller, lighter, quieter, and save floor space.



ADDED VALUE: Research and development has paid off for General Electric's Form G motor (right) making it more reliable, versatile, and easier to install than its predecessor.



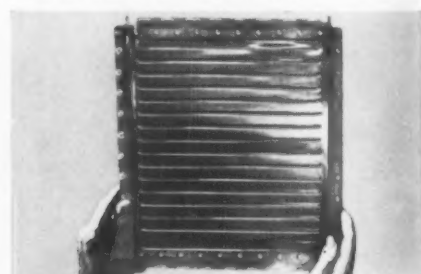
ADDED VALUE: New Thinline motors for limited space are up to 8 inches shorter, 26 pounds lighter than standard end-mounted motors.



ADDED VALUE: Constant research pays dividends in new products. Thermoplastic recorder offers new way to record sight and sound.



ADDED VALUE: Preferred Lighting, a new outdoor lighting program, designed to provide better customer service and product value, offers more light per dollar on America's roadways.



ADDED VALUE: Advanced research explores unconventional power sources such as nuclear fusion, fuel cells (above), thermionic converters.



ADDED VALUE: Electronic testing, a phase of cost-reducing automation in meter manufacturing, assures fast, efficient quality control.



ADDED VALUE: Over 450 Motor Service Stations specifically authorized by General Electric assure purchasers of local high-quality, low-cost repair of smaller-sized G-E motors.

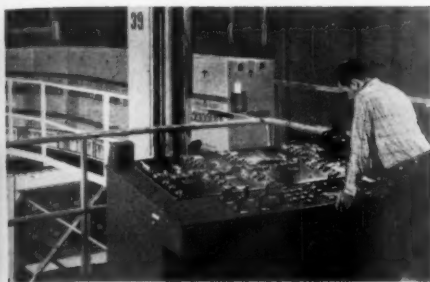


ADDED VALUE: Emergency repair service for electrical equipment is available through G.E.'s network of Apparatus Service Shops.

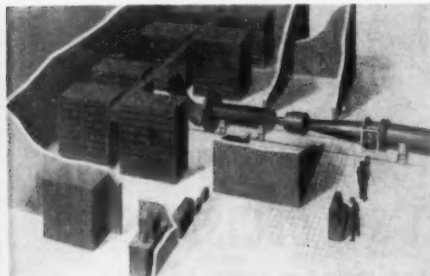
*Trade-Mark of General Electric Co.

GENERAL  ELECTRIC

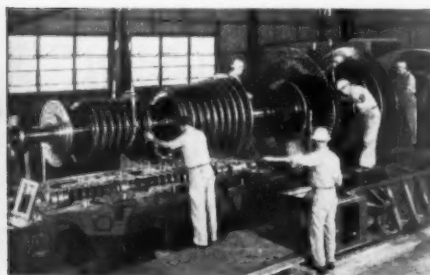
Research, Engineering and Service to Creation of **ADDED VALUES.**



ADDED VALUE: Advanced Automated Material Control systems, designed by General Electric provide greater efficiency and economy in material handling.



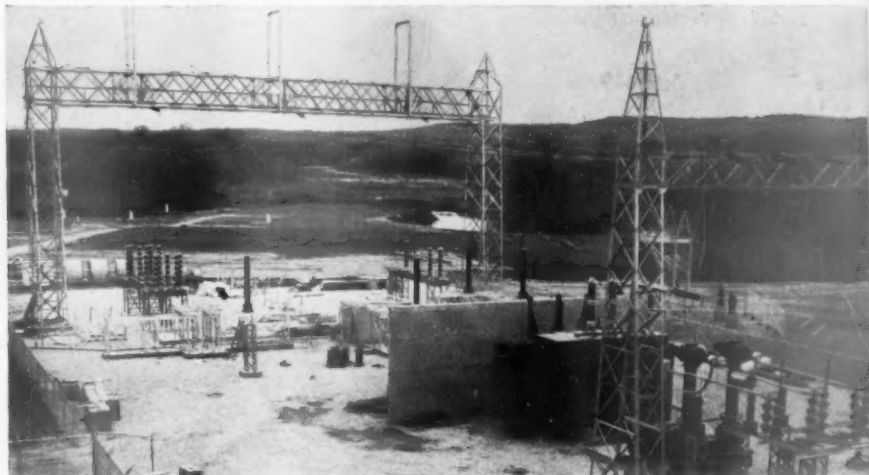
ADDED VALUE: G-E advanced system design provides new tools for the defense industry. This capacitive system powers a space age hypersonic wind tunnel.



ADDED VALUE: G-E Installation and Service Engineers are available to supplement owners' organizations for engineering field service.



ADDED VALUE: Analytical Engineering solves complex planning problems of utility systems. A recent problem involved 25,000 cost factor combinations.



ADDED VALUE: Research into transmission of extra-high-voltage power, up to 750,000 volts, is the purpose of Project EHV. Test results will soon flow at the north substation shown above. G.E. and twelve other companies are cooperating to build this 4½-mile, 18-tower prototype system near Pittsfield, Mass.



ADDED VALUE: Commonwealth Edison's 180,000-kw Dresden station, the nation's largest all-nuclear power plant, began supplying power in April, 1960. The development of the boiling water reactor for this plant represents only a part of General Electric's broad research efforts in the field of nuclear energy.

WE DIDN'T HAVE ROOM FOR ALL OF THEM, BUT . . . these are some of the many contributions that come out of General Electric efforts in research, engineering and service . . . **ADDED VALUES** that you can utilize to serve the markets of the Sixties.

FOR MORE INFORMATION about General Electric products . . . and **ADDED VALUES** . . . why not contact your nearest G-E Apparatus Sales Office. Or, ask your General Electric sales engineer how **ADDED VALUE** can be put to work for you. General Electric Company, Schenectady 5, New York.

962-06

GENERAL  ELECTRIC



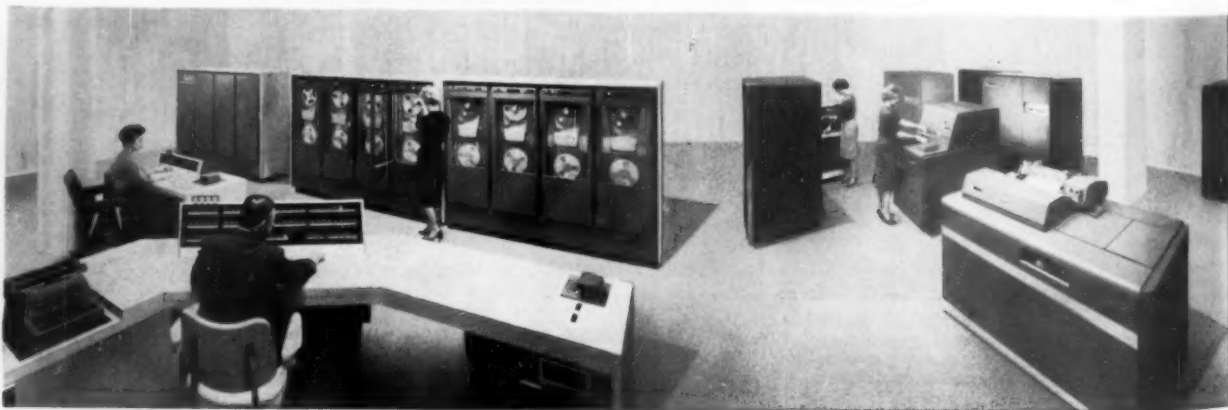
WHICH COMPUTER?

IT'S A DECISION
WORTH MILLIONS...

*several good computers
to choose from*

**BUT 4 SIGNIFICANT
FACTS STAND OUT**

SEE CONTROL DATA'S Computing Center in action at the Minneapolis office.





FACT 1.

Control Data's advanced, large-scale 1604 Computers have been customer operated an average of 72.3 hours per week since acceptance. These computers have been operating with an uptime of 98.5%. Such outstanding performance records represent the total history of customer operation for all 1604 computers since their acceptance.

FACT 2.

Control Data builds and delivers the advanced, large-scale 1604 Computers in less than 10 months. All 1604 Computers have been installed at the sites and fully operating within only 5 days.

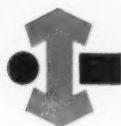
FACT 3.

Control Data's all-inclusive customer services are tailored to meet your needs. Programmer and Programming Assistance. Complete Programming Packages including Compilers, Automatic Routines, Service Library Routines, and Standard Input-Output Routines. Complete Computing Center for Customer Service and Program Debugging. System Planning Analysts. Application Analysts. Customer Training. Field Maintenance. Nationwide Sales Offices.

FACT 4.

Control Data's advanced large-scale 1604 Computers cost hundreds of thousands of dollars less than comparable computers.

FOR COMPLETE INFORMATION about Control Data's full line of completely transistorized computers, Phone FEderal 9-0411 . . . wire or write:
Mr. George S. Hanson, Director of Sales



CONTROL DATA CORPORATION

501 PARK AVENUE • MINNEAPOLIS 15, MINNESOTA



Largest Elevator Contract

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Diesel Construction Co., Inc.,
C. A. Morse, President
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Consultant Architects:
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Mechanical Engineers:
Jaros, Baum & Bolles
Renting & Managing Agents:
Cushman & Wakefield, Inc.
Real Estate Consultants:
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Grand Central City to have world's fastest elevators



"Scheduled for completion in 1962, Grand Central City will be the largest office building in the world, serviced by 65 Westinghouse operatorless elevators and 21 electric stairways. This monumental, 59-story edifice will have a 'population' of 25,000 working persons. In addition, 250,000 transients will pass daily from the main concourse of Grand Central Terminal to the main lobby of Grand Central City.

"To provide the fastest and most efficient *vertical* transportation for the continuing flow of people, we chose Westinghouse for this massive job—a name in which we have the highest confidence based on past performance.

"With the installation of its elevators in Grand Central City, Westinghouse will establish still another 'first' in the elevator industry. For the first time, elevators in a high rise bank will travel at the rate of 1,600 feet per minute—the fastest in the world.

"Both we and Westinghouse are proud of this Grand Central City contract. These electronic, operatorless elevators reflect Westinghouse skill in engineering automatic elevator controls to carry great numbers of people up and down—without the necessity of human supervision.

"Future tenants of Grand Central City can be assured of the finest vertical transportation available anywhere."

Erwin S. Wolfson

Erwin S. Wolfson
Chairman of the Board
Diesel Construction Co., Inc.

WESTINGHOUSE ELEVATORS AND ELECTRIC STAIRWAYS

YOU CAN BE SURE...IF IT'S **Westinghouse**

J-98762AA

TUNE IN WESTINGHOUSE-CBS TV-RADIO COVERAGE, PRESIDENTIAL CONVENTIONS, JULY 10-29

Building executives are cordially invited to see a 30-minute, behind-the-scenes elevator demonstration—the WESTINGHOUSE PRE-INVESTMENT EYE-OPENER. Because the selection of an elevator system is a key decision . . . a major capital investment . . . it deserves your personal attention and approval. As a building owner or manager, it pays well to investigate before you invest. Make arrangements to experience this revealing demonstration by calling the Westinghouse Elevator Division Sales Office in your city.

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What do you need right now . . . tomorrow . . . or in the future? Whatever you need, Ryerson is there—"the fastest with the mostest"—to keep pace with your production lines. Our service in depth is the secret. The instant you order steel, aluminum, plastics or metalworking machinery, Metalogics goes to work—assuring delivery exactly as specified.

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BUSINESS OUTLOOK

BUSINESS WEEK
JULY 23, 1960



Business activity in July undoubtedly will be the lowest for the year to date—and should be the bottom of the saucer (page 25).

You can see the July low all too clearly in the Business Week Index (page 2); the autumn upturn, so far, has to be a matter of faith.

Industrial production through the first half of the year held in a 2-point range—with the high of 111 in January and three months (including June) sharing the low of 109.

That's the story told by the Federal Reserve Board's seasonally adjusted index with 1957 representing the base figure of 100.

And, while the story may lack thrills or excitement, it depicts the "high-plateau" rather than recession.

Businessmen generally are well aware by now that the reason recession has not taken hold is strength in consumer lines which offsets serious slumps elsewhere.

Broadly measured, the index numbers look like this:

Durable goods output in June was 4 points under the padded prestrike levels of the year before.

- Nondurable goods, benefiting by good demand and comparison with more normal conditions last year, pulled 4 points ahead.

Pinpointing this year's business trouble spot, one need look no farther than the commodity producing industries and even more particularly, the primary metals.

The Federal Reserve puts June production of materials generally about 4% behind a year ago with primary metals down by 25%.

Metal fabricating generally has held up surprisingly well, partly due to good year-to-year gains for automobiles.

But autos aren't the whole story. Machinery production in June was off only a fraction of a percentage point from the peak and remained roughly 3% better than a year ago.

Fabricated metal products, over-all, were down only about 2% from the recovery peak reached under last June's unusual conditions and up fairly sharply from the low in April of this year.

Fuels have suffered along with heavy industry, but most particularly as a result of the long slide in steel operations.

Coal has been in the doldrums with seasonally adjusted June output only 77% of the 1957 average and 5 points below last year.

Production of crude oil and gas lagged a shade behind 1957 but the electric utilities outran 1957 by 22% and last year by 5%.

Producers catering to the consumer have done better than manufacturers generally simply because the inventory troubles of recent months did not bring about reductions in employment and income.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

JULY 23, 1960

Employment in manufacturing has declined, of course, either in absolute terms or on a seasonally adjusted basis. However, the setback has been kept small by the better-than-seasonal performance by manufacturers turning out nondurable goods.

And employment over-all has achieved new records (BW—Jul.16'59,p19) despite the lag in farming and in manufacturing.

—●—

Income gains will accelerate, of course, if metalworking takes on a more vigorous tone through the fall and winter.

But, even under existing circumstances, the record is very good.

Personal income for the first half of this year exceeded \$400-billion at a seasonally adjusted annual rate for the first time. This bettered last year's active first half by about 5%.

Improvement in personal income during the first quarter this year was so slow that it might have provided grounds for some concern. However, the second quarter hit a more normal stride.

There was, nevertheless, maldistribution of wages and salaries.

All wages and salaries in June were at a rate 4.3% ahead of a year ago. However, the gain in commodity producing industries was only 2.3% while payrolls in manufacturing rose barely 1.7%.

By contrast, pay in service industries ran 9% ahead of last year while in distribution the rise was better than 4½%.

Payrolls in manufacturing have suffered in several ways.

The work-week has been shorter than last year in both durable and nondurable goods industries (though a turn-around began to be visible in May and June). On top of that, layoffs have been heaviest in the best-paying area—factories turning out durable goods.

—●—

Railroaders are once more wrestling with a perennial problem.

Though demand for their principal services are something very substantially less than spectacular, the new wage agreements have raised costs again. The answer apparently will have to be higher freight rates despite the pressures of competition for available traffic.

Competitive problems are highlighted by the railroads' carloading reports. Though goods recently have moved at record levels at retail, the volume moving by rail has fallen substantially behind a year ago.

Worse still, loadings recently have been averaging little higher than in 1958 when we were barely emerging from the recession.

—●—

Those refineries Cuba took over can produce the needed gasoline and fuel oil, according to oil men in this country. But there still may be a catch that Castro and the Russians haven't considered:

The companies never figured the Cuban market big enough to justify a plant for lubricants, so these will have to be bought somewhere.

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Planned Packaging moves merchandise

Why not your brand?

See the "wrap-around" end panels on this new carton? They give beer and other pack users all-important end panel identification—usually a premium feature—for the cost of regular open-end cartons. Important? Vital! Thirty-five per cent of all store pack displays show carton ends only!

The new "Contour-Pack," an exclusive, new design development by Packaging Corporation of America, offers better sales, lower package cost, faster packaging.

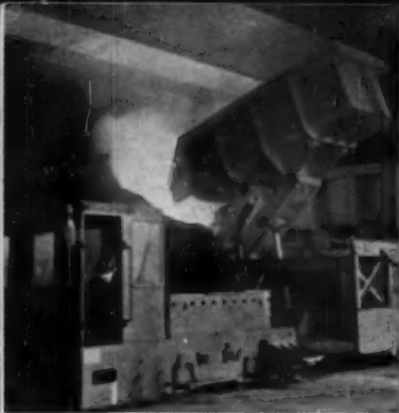
This is but one of countless ways in which Packaging Corporation of America's concept of Planned Packaging, implemented through integrated national facilities, produces better packaging . . . more sales. Whether your requirements are large or small, regional or national, we welcome the opportunity to help you.



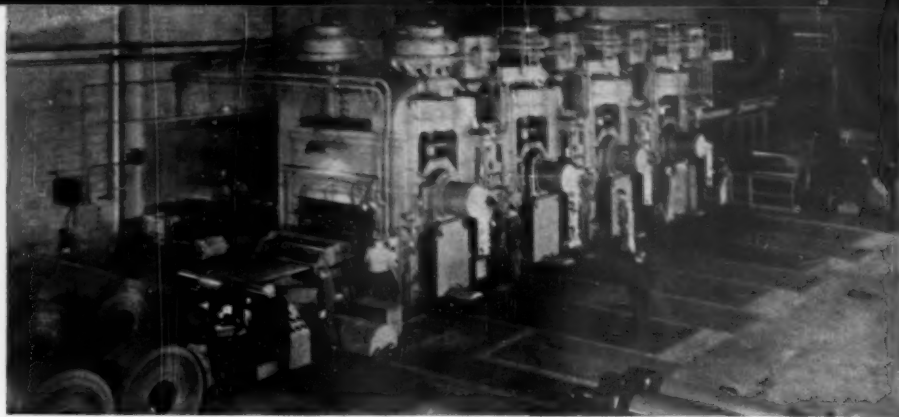
Packaging Corporation of America

1632 CHICAGO AVENUE • EVANSTON, ILLINOIS

Cartons • Containers • Displays • Egg Packaging Products • Molded Pulp Products • Paperboards



Tons of molten steel are served up with computer accuracy by J&L's new basic oxygen furnaces.



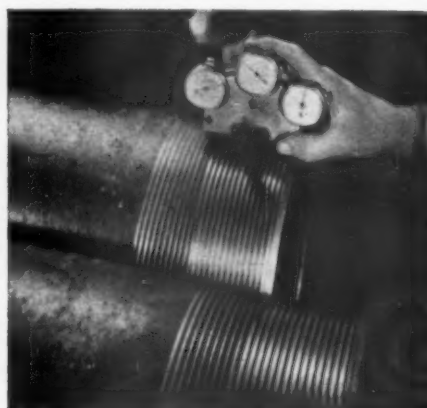
Quality sheets are rolled on the fastest, heaviest, most powerful four-stand cold reducing mill of its type in the world.



From "spudding in" to "bringing in", you'll find J&L tubular products in every major oil-producing area in the world.



Jal-Con-Weld standard pipe is made on two new, precision-engineered continuous weld pipe mills.



J&L's Buttress Thread Casing provides maximum joint strength, is leak-resistant, and fast running for deep hole drilling.

Better products start with J&L steel



The newest, most modern plant in the country rolls stainless steel to precision gauges.



Stainless steel products combine easy upkeep and elegant beauty with carefree living.



The automobile industry consumes 15 million tons of steel a year. A great deal of this steel comes from J&L . . . the nation's fourth largest steel producer.

In the last decade your products have been greatly improved . . . you have improved design, improved production efficiency and demanded improved materials. In the last decade, Jones & Laughlin has invested nearly \$700 million in new plants and equipment to give you the improved steel you demanded—steel to meet your new design requirements, steel to help you improve production by reducing rejects and eliminating corrective processing. This is J&L's contribution to your continued progress—more steel, better steel, steel to match your requirements precisely.

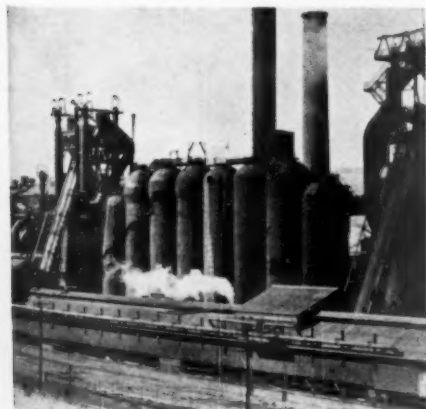
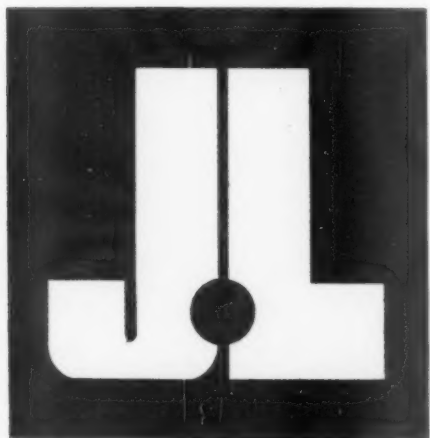
J&L, today, is the leading source for a great number of standard and specialty steels. Sheets for the automotive and appliance industries; tubular products for the petroleum and gas industries; stainless steel for the housewares industry; countless other specialized steels for countless other specialized industries—all are planned and controlled from the ore mines through the mills to your receiving platform.

Better products get a better start — with Jones & Laughlin steel.

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Stainless steel sinks, durable steel cabinets, new time-saving steel appliances . . . serve your customers better with better steel.

THE NEW ROYAL ELECTRIC

pays off letter by letter



The typewriter electricity has been waiting for — compare the work and see.

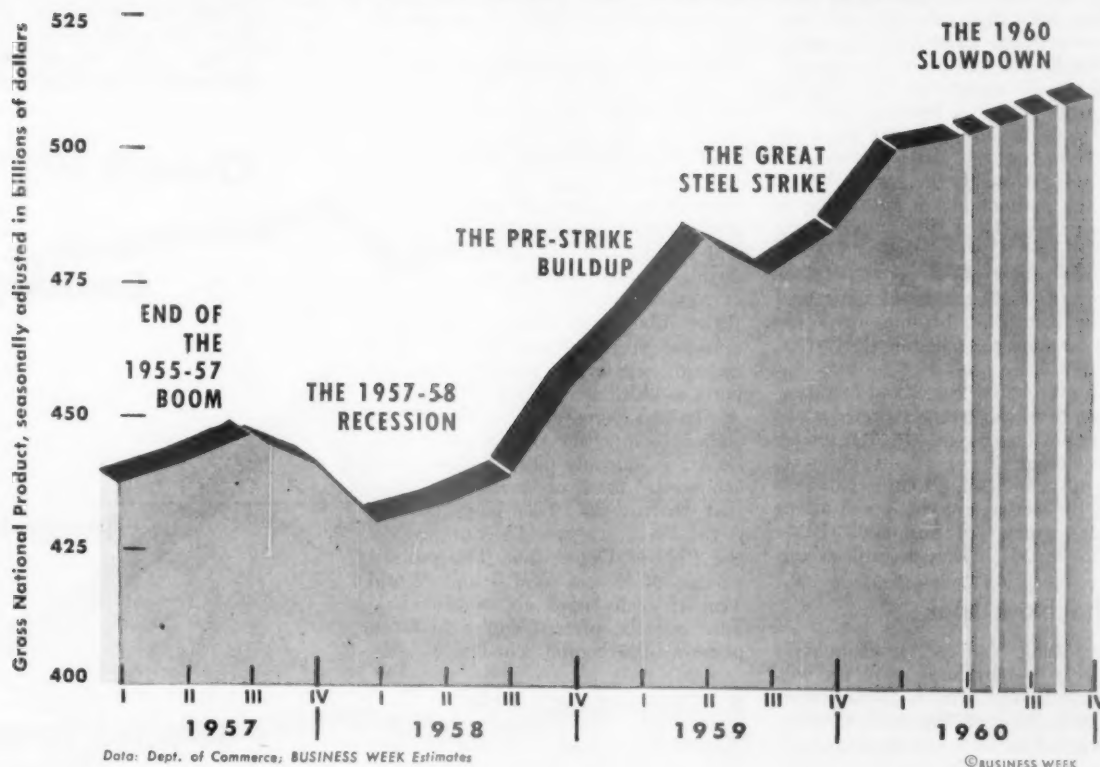
The type bar strikes... and a clear, clean letter appears on the page, etched by the new Royal Electric. Once more, and another letter appears, perfectly aligned with the first. And so it goes, line after line of fine writing, evenly inked and a delight to the eye. And these good-looking lines add up to good-looking letters, letters that you'll be pleased to sign and your secretary will be proud to have typed. For the

new Royal Electric was specially designed to: ① etch letters more clearly than ever; ② ink more evenly than ever; ③ position words and letters more accurately than ever. See for yourself... compare the work turned out by the Royal Electric with that of any other typewriter. Your Royal Representative will gladly give you the opportunity to compare at your convenience.

ROYAL

Available in: Pearl Gray, Mist Green, Petal Pink, Oyster White, Sapphire Blue. A product of Royal McBee Corp., World's Largest Manufacturer of Typewriters.

the trend of business



Sluggish, Slow, But a Climb

Ever since the end of winter, businessmen have felt a peculiar flabbiness in industry after industry. They have sensed without being able to prove it that the 1960 upswing in business is different from past booms. And they haven't liked it.

The charts (above and page 27) show just why they have felt this way. The 1960 model boom is different.

Does this mean that the upswing can't go on? Does it mean that we are faltering on the brink of a new recession—perhaps something comparable to the awful reckoning that hit the postwar world in 1929?

Look at the facts carefully, and you can conclude only one thing: No. The upswing can, and almost surely will go

on. But it will move slowly and a little painfully. It won't feel quite so exciting or so lusty as the booms of the past.

• **Pattern for the Future**—What's more, this is likely to be the pattern of upswings in the future. For what we are seeing is the basic trend of business stripped of certain things that have concealed its real nature throughout most of the time since World War II. It's a continuation of the trend of the "in-between years" that was foreseen three years ago (BW-Aug.10'57,p25). In these middle years, the economy has been moving away from the postwar phase of rapid expansions, and sliding into a period of slower growth—for three major reasons:

• U.S. industry had pretty well

caught up with its capacity requirements.

• Consumers had stocked up on cars, housing, and other durable goods.

• The vast expansion of the money supply, created by wartime debt financing, which had stimulated both growth and inflation, had at last petered out.

Until recently these in-between years have seemed anything but placid. In late 1957, the economy broke downward in a sharp and ominous way—and some economists and businessmen began to run for the hills. But the economy snapped out of this sharp drop in the second quarter of 1958—partly because of the built-in stabilizers which supported income and consump-

tion, partly because of rising government outlays.

• **Swift Shifts**—After a slow turnabout in the second half of 1958, the economy began to spurt ahead in the first half of 1959—because of fast inventory building before the widely-expected steel strike. The strike hit in July—and the economy went into a quasi-recession. With business hampered by developing shortages and layoffs, and damped by the restrictive government policies initiated in the first half of the year, GNP dropped by \$6-billion in the third quarter of 1959.

The steel strike dragged on until November—and, when it finally ended, business looked forward to a mad scramble to rebuild inventories; the monetary authorities got set to fight inflation.

In fact, the economy did break upward from the steel strike as though it were going through the roof. With a burst of production for restocking in the last six weeks of 1959, GNP in the fourth quarter swept back above its prestrike peak—and leaped \$15-billion higher in the first quarter of 1960, passing the historic half-trillion mark just about on predicted schedule (BW—Dec. 27'59, p36).

But, even before the record first quarter was over, the steam started leaking out of the boiler, and the rate of advance slowed down. Bears began to show up in increasing numbers in February; by March, everybody was asking "What's wrong with business?" (BW—Mar.26'59, p23). They are still asking.

I. The New Look

The thing that is "fundamentally wrong" is that business, with the wild inventory swings over, is embarked on an in-between years type of expansion, undisturbed by such outside stimulants as the Suez crisis or the steel strike. This new model expansion can be distinguished from the postwar booms in several ways:

Balance. Earlier upswings were paced by some one sector of the economy that galloped ahead of the others—such as the housing boom in 1949 and 1950, jived up further by Korean defense spending, or the auto boom of 1955, or the capital spending boom of 1956. This time there's no sign that any one sector is running ahead of the rest.

Excess capacity. In earlier postwar upswings, demand pressed hard against existing productive capacity, generated splurges of capital spending. This time the economy is advancing in the midst of excess capacity. The McGraw-Hill Economics Dept. estimates that U.S. industry is now running at about 80% of capacity.

Lack of inflation. Earlier upswings generated inflationary pressures—and widespread expectations of more inflation, which helped jazz up business

spending on inventories and plant and equipment. Now fears of inflation have been stilled.

Unemployment. Previous advances brought the economy close to full employment. This time, after two years of recovery from the 1957-58 recession, unemployment still hovers above 5% of the labor force.

The underlying explanation of this sluggish but balanced advance since 1957 is revealed by the charts. They show that final demand for goods and services in the economy trudged uphill in a remarkably steady way through the past three years; the swings in GNP came mainly from inventory swings.

Consumption was climbing throughout the period—but not fast enough to press on capacity. Capital spending, after its recovery from 1957-58 recession, crawled ahead slowly. Housing went through moderate oscillations, in response to changes in monetary policy and government support for housing credit. Federal spending, after climbing at a slow rate in 1958, was pressed slightly downward. State and local government spending marched gradually upward, quarter by quarter. Net exports wobbled around a flat trend line.

• **Almost a Bore**—Without the wide inventory swings, the period would have been a moderately pleasant bore. One economist, fond of analogies, argues that what we have been going through is the brave new world's equivalent of the 1929-32 Depression. The postwar periods of World War I and World War II each lasted about 11 years—Suez put the present end-of-the-boom phase a little behind schedule.

II. Government's Role

However far-fetched it may be, this analogy may offer certain illuminations—particularly the thought that is starting to preoccupy economists, that, if the economy is to snap out of the present "depressed" expansion, we need a major policy shift from government. You get that line these days from top economists of both liberal and conservative persuasions.

Their position is this: Our tax structure has gotten out of whack relative to the changed structure of the economy, now that the period of rapid postwar growth is over. What's important, capital spending plans of business have been curbed by excess capacity at recent levels of consumer demand. Only the force of new technology, which induces business to spend for the replacement and modernization of plant and equipment, has kept the capital spending curve from sinking.

• **Effect of Taxes**—With investment demand relatively weak, the tax structure carried over from the years of war and boom forces the economy to try

The Ups and

The chart below dissects the economic trend since the start of 1958, showing the elements that made for growth—and instability. It plots the rates at which consumption, inventories, capital spending, and other components of the economy were changing, quarter by quarter. When curves are above the zero line, they show absolute growth; below the zero line, the curves mean absolute decline. The slope of the curve shows whether the movement—in either direction—

Changes in:

Consumption

Inventories

Capital Spending

Housing

Federal Spending

State & Local Governments

Net Exports

Downs Behind Three Years of Business Shifts

is gaining or losing speed.

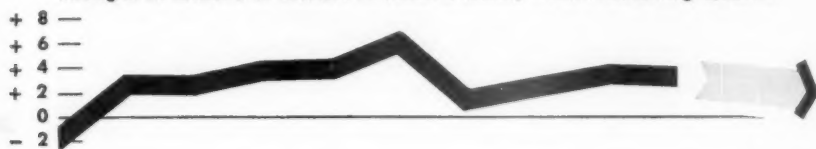
What this chart reveals is that most sectors of the economy—consumer goods, plant and equipment, housing, federal, state, and local government spending—have been remarkably stable since 1958, with big inventory swings accounting for most of the departures from slow and steady growth. There was little push (shown by balances above the zero line) in capital spending, housing, or government—the dynamic factors in the econ-

omy. Consumption grew steadily throughout the period, but not fast enough to generate much push on capital spending. Without the inventory swings—the fast recovery from the wild inventory cutting of 1958, augmented by the buildup for the anticipated steel strike, and the subsequent gyrations in inventories after the steel strike—this period would have been extremely boring—as, suddenly, it now seems to be.

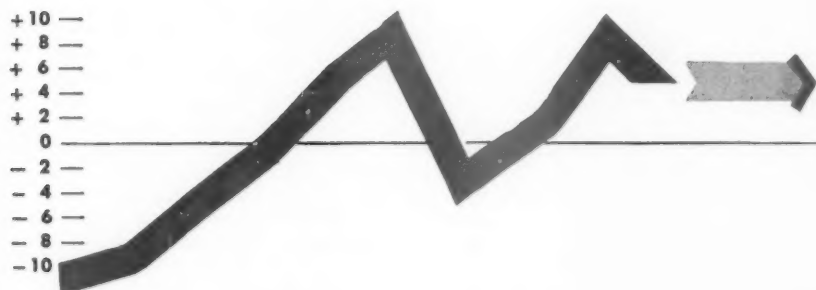
With the great steel strike fading

into history and its zigzag effect upon inventories petering out, business is resuming its sluggish upward course. Right now, it's hard to find anything—outside politics, international or domestic—that could give it a powerful shove upward; but it also is hard to find anything likely to shove the trend downward in the second half of this year. Big question for 1961: How far does the plateau extend, and do we climb off it—or roll off it?

Changes in Billions of Dollars at Annual Rates, From Preceding Quarter



Slower gains ahead—with consumers hesitant and heavily in debt.



Inventory gyrations over for now—no extra downward pressure



Tapering off—because of profit squeeze and excess capacity



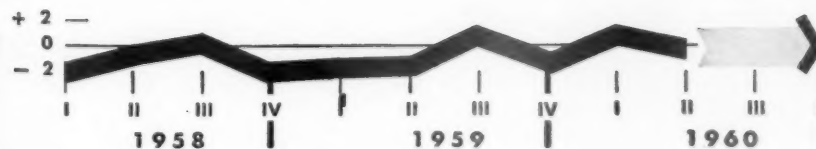
Not much change—unless government feeds in mortgage money



Small pickup already in works—mainly due to defense & bigger civil service paychecks



Usual small gains continuing



No extra push from exports in sight

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to save as though a war or a capital spending boom were on. In the absence of strong investment demand or a rise in government spending, this forced increase in gross savings exerts a serious drag on the economy.

Administration economists figured that, at present tax rates, an estimated \$510-billion GNP this year would yield a \$4-billion budget surplus. But \$510-billion is still not a full employment economy. To get full employment this year, GNP would have to rise to \$525-billion to \$530-billion.

At the full employment rate of \$525-billion or \$530-billion, the surplus in the federal budget would climb to \$7-billion—or higher. The extra \$15-billion or \$20-billion in GNP would throw off an extra \$3.5-billion or \$4-billion in tax revenues.

• **Fine—if You Get It**—This would be great, the economists say, if you actually got it and could use it for debt reduction. The trouble is that you don't get it because the tax burden is so heavy that, at a time when private investment is not expanding strongly, the economy does not attain full employment.

Consumption grows too slowly to wipe out excess capacity. Government spending—in its sideways trend—doesn't make up for the lack of vigor in business investment. That's why the chances of achieving a faster growth rate, one that would bring the economy closer to the full employment level in 1960 or 1961, are likely to depend heavily on a shift in government policy—either toward more government spending, or tax reduction, or some combination of the two.

The question of what changes of budget and fiscal policy are needed for a faster growth rate is shaping up as a major issue of the Presidential election (page 120).

The Democrats have committed themselves to boosting the economy at an average annual growth rate of 5%—and mean to do this mainly by increasing government outlays on defense and social welfare. The Republican position has not yet clearly emerged—but it's likely to lean toward some moderate combination of spending increases and tax reduction.

III. The Months Ahead

All this is speculative—and depends not just on how the voters behave in November but on how the Soviets, the Chinese, and their collaborators behave.

What's probable now is that the economy will go on slogging uphill the rest of the year. Here's why:

• **The drag from the rapid reduction in the rate of inventory building** (which dropped from \$10.6-billion in the first quarter of 1960 to about \$5-billion in the second quarter) is about

over, and inventory accumulation should go on at about a \$4-billion to \$5-billion rate in the second half. Sales-to-inventory ratios are low by historic standards—particularly in steel—and there's room for inventory building.

• **Capital spending by business on new plant and equipment** will increase by about \$1-billion in the second half of 1960, according to the latest SEC-Commerce survey (BW—Jun. 11 '60, p27). Pressure on profits and the continuing overhang of excess capacity make a lustier performance unlikely.

• **Consumer spending** will continue to grow—but at a reduced rate. The Michigan survey showed consumers in a rather hesitant mood; well they might be, with heavy debt loads, very slowly rising income per capita, and unemployment still hanging over some sectors of the economy. Figured at annual rates, consumption gained \$8-billion in the first half of the year; it will do well to rise by \$6-billion in the second half.

• **Net exports** climbed by about \$2-billion in the first half of 1960—with the boosts coming from special situations in jet aircraft, wheat, and cotton. It seems unlikely that a further rise in exports can be expected for the second half. But decline in U.S. imports of autos may help the net trade balance.

• **A rise in government spending** will help push the economy forward in the second half of 1960. The end-of-the-fiscal-year burst of contract letting mainly for defense wasn't quite so big as usual this year, but contracts are flowing out now at a faster rate. Faster defense spending plus the boost of \$800-million in the yearly pay of government employees is sure to increase federal outlays in the second half. State and local government spending will continue to rise in the second half, adding \$14-billion to \$2-billion to GNP.

• **Slow Climb**—What all these small gains add up to is an end-of-the-year GNP rate of about \$512-billion or \$514-billion—from the present rate of \$504-billion. That kind of slow climb upward will thus make the GNP for 1960 as a whole total about \$505-billion—a more sluggish performance than the Administration, business, or most economists had expected.

• **Next Year?**—Right now it's awfully hard to find an economist who looks for a faster rate of gain in 1961; and quite a few have begun to forecast recession in 1961. Their case is built around the thesis that consumption is rising too slowly to sustain the present rate of capital spending. They argue that economic plateaus are built on crumbling rock.

Administration economists stress the balanced growth of the economy rather than its sluggishness. They think a recession next year is anything but a foregone conclusion.

Communists

THE U.S. is now in the middle of another acute crisis in East-West relations.

The crisis has been brought on by the worldwide offensive the Communist camp has mounted against the West, especially against U.S. influence around the world. In this offensive, the Communists have opened up two huge new theaters of East-West conflict—Latin America, where they have an ally in the Castro regime, and Africa, where near chaos in the Congo has given them an entering wedge. At the same time, the Communists are threatening trouble in older theaters—Berlin, Italy, Iran, Southeast Asia, and Japan.

• **U. N. Arena**—This week, the diplomatic part of the battle was joined at the Security Council of the United Nations (picture). On Monday and Tuesday came the Soviet effort, which was only partially successful, to blacken our eye over Cuba. On Wednesday, it was the Congo, with the Soviets trying to take over from the U. N. as the chief protector of Congo independence.

Ahead, at the U. N., there still lay the issue of our RB-47 aircraft that was downed some two weeks ago 30 miles off Soviet territory.

• **Administration Stand**—Meanwhile, Pres. Eisenhower and Secy. of State Christian Herter held an emergency meeting at Newport and decided on a much tougher line against Moscow.

By midweek, moreover, there was strong pressure within the Administration for something more than strong words. There was serious talk of putting the Strategic Air Command on a constant airborne alert—not because Washington is expecting war but for its psychological effect.

The fact is that the U. S. government and our major allies now regard Communist pressure on a dozen spots around the world as the boldest and most serious challenge the West has had to meet since Korea.

• **Big, Ugly Threat**—According to some U.S. officials, there is already sufficient evidence to indicate that the Soviets "are planning something big and ugly—probably in Berlin." Then, you have Prime Minister Macmillan's warning this week that Moscow's present policy could lead to a critical war situation.

What worries Western leaders is the variety, scale, and intensity of the Communist offensive. It includes missile threats against the U.S.; a straight power play against Berlin; the use of local Communist parties in Italy and Japan to foment civil strife and undermine the American alliance; and subversion in such spots as Iran and Vietnam to undermine the existing governments.

Stir Up Trouble Around World

Their stepped-up drive opens huge new theaters of East-West conflict, in Latin America and Africa.

Meanwhile, they threaten in such older areas of trouble as Berlin, Italy, Southeast Asia, Japan.

Diplomatic sparring centers in the U.N. Security Council as Russia tries to make itself protector of the Congo.

You could sum it up as an effort to promote world revolution under the protection of Soviet missiles.

• **Revolutionary Bias**—There's no doubt that Moscow has placed itself squarely on the side of revolution in Africa and Latin America, thus extending the East-West power struggle to two continents where it has been pretty much in abeyance.

In Africa, the Soviet aim seems pretty clear. It is to gain a foothold in the Congo and wherever else there is a chaotic situation rather than an orderly transition from colonialism to independence. In this way, Moscow hopes, at the very least, to divide Africa into pro-Soviet and pro-Western groups of nations.

I. Congo Crisis

This week it seemed that only the U.N. stood in the way of Moscow's ambitions in Africa. Fortunately for the West, U.N. Secy. Gen. Dag Hammarskjöld moved in on the Congo situation as soon as this new nation disintegrated to the point where Belgium had to send in troops to protect its nationals.

By last weekend, Hammarskjöld already had several thousand U.N. troops on the spot, transported largely by the U.S. Air Force from Tunisia, Ghana, and Morocco.

On Wednesday, his big problem was to get Belgian troops entirely out of the country, and to do it a lot faster than Brussels wants them to leave. Otherwise, according to Premier Lumumba, the Congo government will call in forces from the Soviet Union and all the nations of the Bandung powers, including Communist China.

• **Brussels' Mood**—At midweek, though, it still wasn't certain that Belgium would pull its troops out of Katanga, the mineral-rich province whose government has seceded from the Congo. Belgian business interests desperately want to hold their position in Katanga at any cost, while Lumumba is equally determined not to lose its riches and its tax revenue.

The mood in Brussels this week has been a little like that in Paris during

May, 1958, just before rightwing forces brought Gen. Charles de Gaulle to power in order to save Algeria for France. However, both Washington and London have been urging Brussels to follow a cautious policy, and it seemed as if the Belgian government would give way to any resolution in the U.N. Security Council that had American and British backing.

• **Starting From Scratch**—Even if the Katanga problem can be solved—and this would reduce the danger of an open East-West conflict in the Congo—the U.N. still will have a tremendous job to do. It would be by far the most difficult and complex peace-making job the U.N. has ever undertaken.

Assuming that U.N. forces bring back law and order to the country, the U.N. would then have to start building an administration for the Congo. Beyond that would lie the job of putting the economy back into running order. In both the administrative and the economic areas, the country has had only the shell of a civilized nation. Everything has depended on the Belgians.

Even if this job can be carried out with some effectiveness, there will be plenty of room for Soviet agents to

cause trouble and for official Soviet influence to penetrate the country. Moscow will certainly claim that the U.N. would never have forced the Belgian troops out unless the Soviet government had stood ready to back up Lumumba's threats.

II. Castro and Cuba

In the case of Cuba, the U.S. has temporarily stymied Moscow's efforts to use the U.N. to weaken our hand in dealing with Castro. With the help of other members of the Organization of American States, we managed this week to get the Cuban complaint against the U.S. shifted from the Security Council to OAS itself.

This doesn't mean that Washington has lined up enough Latin American support against Castro to force him to break his close ties with Moscow. What the Latin Americans have done is to band together against the Soviets, telling Premier Khrushchev to keep his hands off the Western Hemisphere. Now they want to see if they can't start settling the U.S.-Cuban feud in OAS, without any interference by the Russians.

• **Moscow Reaction**—For the moment, Moscow seems to be accepting this situation. The Russians didn't use their Security Council veto to try to block the shift of the Cuban problem to OAS. Apparently, they feared that such a move would offend Latin America, thus blocking Khrushchev's persistent efforts to arrange a Latin American tour that would include Havana.

Clearly, Moscow hasn't lost interest in exploiting the Cuban situation for all it's worth. The Soviet government is



U. N. SECURITY COUNCIL is cockpit of East-West fighting over Cuba and the Congo.

heavily committed to Castro economically, as indicated by this week's purchase of 700,000 tons of sugar for some \$45-million. A trade mission from Communist China is also now in Havana to discuss sugar deals.

One of Moscow's main hopes is that Castro will make a big international problem out of the U.S. base at Guantanamo Bay. This could well happen at the big 26th of July Rally that Castro is arranging (page 77).

Some Western observers believe Khrushchev is even aiming to establish a Soviet base in Cuba. In this way, so these observers believe, Khrushchev could dramatize the whole issue of U.S. bases around the world and then get in position to make the disarmament debate turn on the question of overseas bases rather than on inspection and control. Up to now, the U.S. has managed to keep the matter of bases out of the official disarmament discussions.

Negro Boycott . . .

. . . of white retailers puts economic pressure on Southern businessmen as Negro communities support sit-ins.

With most Negro students away from their college campuses this summer, Negro sit-ins, demonstrations, and other forms of pressure against discrimination are not hitting the headlines as frequently as earlier in the year. But the pressure goes on, particularly in the economic area. This week in Knoxville, five downtown stores and two located in shopping centers opened their lunch counters on an equal basis. Knoxville raised the total to about a dozen cities that have taken similar action.

And the struggle goes on in other places. In Miami, talks between white and Negro groups continue. In Chattanooga, negotiations promised solutions but have stalled.

The Pattern—As Negro action mounts, Southern businessmen, as well as those in companies outside the region, are accepting the fact that they will be facing this kind of pressure for a long time to come. Now a pattern is emerging that sheds some light on what they can expect:

- The Negro movement is becoming increasingly organized.

- In those cities where solutions have been worked out, the solutions have resulted from negotiation between white and Negro groups.

- Negroes have set new goals and new targets. Job opportunities are the issues in the latest efforts, and Negroes

are moving into new areas of struggle—such as public parks and bathing beaches.

- Negroes face new problems themselves. Sit-ins can be handled by students, but a boycott calls for the entire Negro community's support.

Adult Support—There is little doubt that the adult community supports the students. When oldsters are placed in the position of having to side either

with their sons and daughters or with the white retailers they have no real choice.

A recent study by the Rounsaville radio stations (with headquarters in Atlanta) concludes: "... where there are significantly large Negro populations, the importance of the Negro as a consumer . . . is so great . . . that it could very well be the difference between profit and loss for an advertiser."

Speeding Up First Atlas Bases

Construction has been plagued by delays, is months behind schedule. But Defense and Labor Depts. are scrambling to clear away the snags.

The Defense Dept. and Labor Dept. are scrambling to rush construction of the first four Atlas ICBM bases, which are running three to six months behind schedule, and to prevent similar delays at other missile sites under construction.

The first installations were started between 14 and 24 months ago at Warren Air Force Base, Cheyenne, Wyo.; Offutt AFB, Omaha, Neb.; Fairchild AFB, Spokane, Wash., and Forbes AFB, Topeka, Kan. None will be combat-ready until late this year or early in 1961. Eleven other Atlas or Titan bases are being built.

- **Gumming the Works**—Several issues are involved in construction delays:

- **Jurisdictional disputes** between missile manufacturers and their workers belonging to industrial unions, on one hand, and contractors and their building trades union men, on the other.

- A flow of change orders in construction specification, generated by missile test launchings conducted concurrently with building of the bases.

- A fuzzy separation of functions among the four Air Force and Army commands involved in construction.

It all boils down to this: Building of ICBM bases has posed technological and management problems that are brand-new to the military.

- **Jurisdictional Clash**—In the Atlas projects, the missile manufacturers—Convair and its associate contractors—have been given wider responsibility than have ever been granted arms makers. In addition to making the equipment, they are in charge of installing and checking out the hardware and even have much to say about construction specifications for the bases.

This brings them into a head-on clash with the construction and mechanical specialty contractors who have traditionally built military bases. There has been a dispute, for instance, over installation of electronic guidance consoles—the manufacturers and their workers want to do it; construction elec-

tricians claim it's in their bailiwick.

Behind the disputes is the fact that much of the missile ground support equipment is experimental, and assembly and installation of the equipment at the missile sites require supervision by the manufacturer's engineers. What's more, since no one has ever built ICBM bases before, there are few if any established trade practices spelling out who does what.

- **Making Plans**—To clear up the muddle, Washington is working up these plans:

- **The Labor Dept.** is drafting a regulation to specify how much of the disputed work on bases should go to the building trades. The department has the power to set wage rates for construction workers on government projects under the Davis-Bacon Act and for industrial workers under the Walsh-Healey Act.

- **The Defense Dept.** is studying a plan to set up a single construction "czar" or expeditor at each missile site, with power to make binding decisions on local jurisdictional labor disputes and other sticky issues. This week, to help clarify who's running the show, the Air Force switched management responsibility for making ICBM bases combat-ready from the Air Research & Development Command to the Air Materiel Command.

- **The Army Corps of Engineers**, in charge of brick-and-mortar construction of missile bases for the Air Force, is bowing to Air Force pressure for tighter supervision over construction contractors.

For one thing, the Corps has set a new policy requiring a prime contractor on ICBM jobs to do a minimum of 15% of the construction work itself. The Air Force has been peeved that the prime award on the Offutt site, the most troublesome project, went to the Malan Construction Co., a so-called "job broker," which farmed out 90% of the job to subcontractors.

Pressures Dent Steel Price Line

● Steel mills are sticking to their published prices on carbon steel, but cost of steel is softening steadily.

● Overstocked warehouses have been revising prices and some are writing off extra charges.

● And steel companies are boosting dealer discounts on some products to promote harder selling efforts.

Steel mills are sticking to their base prices on carbon steel. But that's just about the best you can say for steel prices after a five-month decline in orders that has put steel production into a deeper-than-usual summer trough.

Of course, fundamental to the cost of steel are its "extras"—additional charges beyond the base price which represent the cost of some nonstandard operation. In total, almost every steel order contains enough extras to have a real impact on cost. Individually, though, such charges normally are small compared to total cost. Hence, when price pressure exists, a convenient way to accommodate it is to refrain from charging for the extras.

As always, there's disagreement on how widely, if at all, extras have been traded away in recent months. Substantial steel buyers as well as steel industry sales executives say officially they know of virtually none of it, add they would be surprised if any were done by major companies. Yet the rumors have persisted for months that extras have been written off fairly freely. There's some acknowledgment that some warehouses, finding themselves overstocked, have offered extra free steel.

• **Steady Softening**—Since late January, actually, the cost of steel—as opposed to its published price—has been softening rather steadily. Primarily, this has been among warehouses (BW—Jan. 23'60, p38, Jan. 30'60, p36). Some of that softening has been the result of repeated attempts by big warehouse chains to work out a satisfactory system for accommodating very small orders and still not lose money on them. But not all of it. Periodically since January, warehouse prices have been revised in major cities, and the net effect has been over-all reductions. The latest of these flurries came in June. In a number of cases, the cuts have been announced frankly as "meeting competition." Since the carbon steel warehouses continue to bulge, it's hard to imagine their price structure will harden significantly during this quarter.

One of the very few movements in carbon steel mill prices—which purists

insist isn't a cut at all—came to light last week. It involved standard pipe, on which National Tube increased its dealer discount from 3% to 5% July 1, with other producers following. The change will cost producers perhaps \$3.25 per ton, but it isn't likely, except in rare cases, to save customers anything at all. Mostly, the mills regard it as a promotional effort. In part, it's aimed at getting distributors working harder to move pipe—one of the hardest hit products in the entire steel list. And in part, it's an attempt to keep them from buying foreign pipe.

At the same time, line pipe producers gave standard pipe distributors a 5% discount on some grades of line pipe on which previously they'd had no discount at all. Ordinarily, line pipe is sold almost exclusively by oil field supply houses or the producers. Here again, the move was an attempt to get some extra selling muscle behind the product.

Both raw and finished steel conduit, another tubular product, was cut 3% last March (BW—Mar. 19'60, p38) in a belated move to match a cut aluminum had made months before on invading the conduit market.

• **Import Decline**—Published prices of foreign steel, which had a real impact on the steel warehouse price structure in the first quarter, were cut quite widely in May. Since then, there have been relatively few changes in these published prices. Of less than a dozen further reductions, seven have come in inland markets, reflecting reopening of the St. Lawrence Seaway.

Steel imports have dropped severely since the end of the first quarter reflecting a high economic level in Europe as well as expiration of forward commitments some U.S. buyers made in anticipation of a renewed steel strike. The decrease in imports eases price pressure widely, steelmen say.

But both producers and warehousemen agree that any marked decline in West Europe's economy would turn the steel import situation around and renew price pressure here. Presently, they add, foreign steel prices in the U.S. are slightly under domestic mill

prices. At various times during the steel strike inventory buildup and the strike itself, they have been well below and somewhat above domestic mill prices.

At least two regional U.S. producers have cut carbon steel prices this year to meet heavy foreign competition head-on. Oregon Steel cut prices on hot-finished bars and light structural shapes and Atlantic Steel cut prices on nails, reinforcing bars, and merchant wire products, the latter only this month. And several major producers as well as some small mills cut prestressed strand wire prices last month.

In May and June, several specialty steel producers cut certain extra charges on several types of vacuum-melted tool and aircraft steel.

One of the most significant pricing moves of the year took place last month when U.S. Steel instituted promotional prices for products it is not ready to offer commercially in any great volume—tinplate in thinner gauges than the most popular weights. U.S. Steel adjusted its highly complicated tinplate price schedules to remove certain penalties that faced the buyer who wanted lighter tinplate. The move was part of steel industry campaign to counter aluminum's promotional selling.

• **Outlook**—As for a general increase in base prices next December, when the first round of wage and other employment cost increases take effect under the new steel-labor agreement, steelmen are split. But almost nobody is willing to forecast that there will be such an increase then. Most believe that a small increase will be readily justifiable and some say they simply must have one. But everyone agrees no decision will be made before the last minute.

It's hard to escape the feeling that unless fourth-quarter business turns out distinctly better than now appears likely, it will be pretty hard to put a general base price increase into effect. It's true that steel raised prices successfully when the operating rate was low in both 1954 and 1958.

Pretty widely, though, the trade agrees that both those moves came before there was any broad industry realization that steel price boosts had gone about as far as they could and should. Notably in 1958, U.S. Steel refused to take price leadership. Thus the increase then was put in piecemeal and instituted by quite a few different producers.

People who know U.S. Steel thinking rather well are confident it won't initiate any price increases next winter. But they indicate that if other major producers take the lead, as in 1958, the corporation probably would follow.



ACCLAMATION greets Candidate Kennedy as he arrives at Democratic National Convention to speak following his nomination.



Back at Kennedy's Biltmore Hotel suite, Democrats crowd around doorway trying to get appointments with party's new leader.



Kennedy takes time, in room of former Mayor John B. Hynes of Boston, to read convention reports and think things over.



Issues crowd in as Kennedy, at meeting of Negro delegates, answers questions on Sen. Johnson's stand on civil rights in platform.

Kennedy Grasps the Party Reins

Sen. John F. Kennedy, the new leader of the Democratic Party, lost little time in asserting the new power that his first-ballot nomination as Presidential candidate gave him.

In a swift series of meetings with Democratic leaders (pictures), Kennedy grasped firm control of the national organization, then flew off to his summer home at Hyannis Port, Mass., for a brief vacation before the campaign begins.

• **Eyes on Chicago**—As he steps momentarily out of the spotlight, the campaign issues are being sharpened up in Chicago by Republicans coming together for next week's convention. By the middle of next week, the GOP will have ratified a platform that is expected to hold out the prospect of somewhat

more vigorous federal intervention in the economy than the Eisenhower Administration has been willing to undertake—but quite a lot less than the Democrats pledge to attempt.

And, barring a political miracle, the Republicans will have nominated Vice-Pres. Richard M. Nixon of California, age 47, to be their White House candidate against the Democrats' Sen. Kennedy of Massachusetts, age 43.

• **Suspense**—The only real suspense concerns the second half of the GOP ticket.

New York's Gov. Nelson A. Rockefeller, who probably could do more than any other to strengthen the Nixon-led ticket, sounded vehement this week as he continued to reject the notion of abandoning his seat of political power in

Albany for anything less than the Presidential nomination.

Other possibilities seem to have narrowed to four: Henry Cabot Lodge of Massachusetts, U.S. ambassador to the U. N.; either of the two Kentucky senators, the "liberal" John Sherman Cooper or Thruston B. Morton, who doubles as party national chairman; or Interior Secy. Fred A. Seaton of Nebraska.

Lodge was beaten by Kennedy for the U.S. Senate in 1951, but his constant involvement in foreign affairs makes him the favorite, if and when Nixon gives up completely on the idea of luring Rockefeller as running mate.

Yet the question persists: If Kennedy could get Senate Majority Leader Lyndon B. Johnson, his chief rival for top



First come the congratulations of convention supporters, and the acknowledgements to those who helped win on first-ballot . . .



. . . Then the applause and hand-shaking by gallery admirers who crowd the corridors as Kennedy pushes his way through to his first post-nomination press conference, outlining his immediate plans and campaign program.



Labor backers of Kennedy assess labor's chances in campaign and plan their role: Alex Rose of hatter's union (left), Walter Reuther of Auto Workers, and AFL-CIO special counsel Arthur Goldberg.



Looking ahead to campaign are Kennedy; the retiring Democratic national chairman, Paul Butler; the new chairman, Sen. Henry M. Jackson of Washington; and Johnson, Kennedy's running mate.

spot, for a running mate, why should not—or could not—Nixon get Rockefeller to run with him?

I. Why Johnson Runs

For the nomination of Lyndon Johnson for Vice-President was the one genuine surprise of the Democratic convention. The elements in the party that most heavily influenced the platform language, and contributed most to Kennedy's success, were shocked.

But the general feeling is that Kennedy pulled one more in a series of political master strokes, that the Texan moderate's presence on the ticket will lend substantial strength.

• **Logical**—The surprise was not only that Kennedy would offer second place to Johnson; even more, it was that Johnson would accept. On reflection, his acceptance becomes perfectly logical.

For Johnson, there is little risk. A special law enacted by the Texas legislature earlier this year permits him to run simultaneously for Vice-President and for reelection in Texas to his Senate seat. Thus, even if the Democratic national ticket loses and Kennedy goes into eclipse, Johnson will still be very much alive politically.

In any event, Johnson's age—only 51—does not discourage further Presidential aspirations. Even should Kennedy win two White House terms, Johnson eight years hence would be merely 59—an age once considered more or less ideal for a Presidential candidate.

Further, Johnson tacitly recognizes that he has only partly succeeded in shedding the geographic political tag of a Southerner. In taking second place, he acknowledges in effect that the way for a Southerner to earn a shot at the

Presidency is to work his way up the ladder gradually.

Points of Strength—Kennedy, in a typically cool and calculating move, made the offer to Johnson simply because the Texan is strong where the New Englander is weak or feels potentially vulnerable:

- Johnson's presence on the ticket will be interpreted in the South as a signal for reason and moderation in prodding Southerners on desegregation.

- His presence will temper fears in oil and gas producing states that a new Democratic Administration might undertake a frontal attack on the 27½% depletion allowance.

- His rural background and first-hand knowledge of farming should help offset farm belt suspicions of Kennedy.

- In areas where Kennedy's Roman Catholicism is most likely to be a severe political liability—the South, the



RIVALS BECOME TEAM-MATES—Despite forecasts of Kennedy-Johnson friction, most see political views as harmonious.



ALL OVER FOR NOW—Following convention, Kennedy boards private plane with members of family for vacation at Hyannis Port.

border states, and to some extent the rural Midwest—Johnson is the strongest Democrat on the national scene.

Converging—Some foresee friction between the two strong-minded, aggressive Democratic candidates. This, of course, is possible, but Kennedy has often given the impression of talking much more liberally than he votes, and Johnson has been made out to be much more conservative than he really is.

More often than not, their political views merge. Both accept the idea that a greater economic growth rate is a necessity and that more, not less, federal intervention is the way to get it.

II. Kennedy Men in Charge

One of Kennedy's first decisions, after the shouting died down in Los Angeles, was to install Sen. Henry M. Jackson of Washington as the new national chairman. Jackson has been a close personal friend of Kennedy for years, but he has only a nominal role in directing the coming campaign.

The major new personalities in the Democratic top command will be:

- **Robert F. Kennedy**, the nominee's 34-year-old brother, who has been and will continue to be the campaign manager.

- **Theodore C. Sorensen**, the senator's No. 1 "egghead," chief political adviser, and speech writer extraordinary.

- **"Intellectual Sponge"**—Sorensen, at 32, is probably closer to Kennedy than any other person, including members of the large and close-knit Kennedy clan. A Phi Beta Kappa whose boyish look conceals a will of steel and a brilliant mind, he came to Kennedy from the University of Nebraska Law School in 1952, with a lavish recommendation from Sen. Paul H. Douglas of Illinois.

The description is hardly fair either to Sorensen or Kennedy, but Sorensen serves in effect as the senator's "intellectual sponge." Over his desk, en route

to Kennedy's, goes the stream of position papers ground out by the so-called Harvard group of professors and others (BW—Jun. 18 '60, p170).

It was Sorensen who first led Kennedy to take a fling at national politics. In 1956, he did the research for and wrote a paper advancing the theory that there is a "Catholic vote" and that a Roman Catholic candidate for national office would gain more votes because of his religion than he would lose. His theory was that immigrant offspring are reaching maturity now in such numbers as to provide a balance of power in the most populous states.

- **Younger Brother**—Robert Kennedy, more familiarly known as Bobby, was for a time better known than his brother. This stemmed from Robert's Congressional committee service, first with the late Sen. Joseph R. McCarthy's Communist-hunting subcommittee, and more recently as chief counsel for Sen. McClellan's labor rackets committee.

The McCarthy committee attachments have caused some slight embarrassment of late, but the Kennedy people explain—and the facts seem to bear them out—that Robert Kennedy and McCarthy never had a close working arrangement. The younger Kennedy left the committee in 1953 after a running dispute with Roy Cohn, McCarthy's most intimate staffer.

- **Lieutenants**—Robert Kennedy will be coordinator of the whole campaign operation, calling the shots both for the senator and the Democratic National Committee. Working with him will be other "new name" political operators who got their political schooling in the Kennedy campaign.

Among them are the youngest Kennedy brother, 28-year-old Edward (Ted), chief operator in the Far West for the nomination buildup; John M. Bailey, Connecticut state chairman; and Lawrence O'Brien, Springfield (Mass.) public relations and advertising man who

mapped tactics for Kennedy's successful Senatorial campaigns in 1952 and 1958. O'Brien will tend shop in Washington, in charge of "production" at campaign headquarters.

One of the remarkable things about this Kennedy staff is its youth. Roger Tubby, one-time press aide to Pres. Truman and to candidate Adlai Stevenson, commented wryly: "I'm still in my 40s, but around here they call me 'the old man.'"

- **Battle Plan**—In the Kennedy battle plan, both the senator's personal staff and the national committee will be brought together under one roof in Washington, under Robert Kennedy as operating chief. Robert will be on top of every speech or press release and will stay at the candidate's side. Sorensen will be on a par with him, but more concerned with issues and speech writing and somewhat out of the line of command on strategy.

Eventually, Johnson will likely merge key sectors of his personal political staff with the Kennedy-National Committee headquarters, giving the Democrats a unified campaign organization. Neither in 1952 nor in 1956 did Stevenson ever make such a move. Kennedy considers that a grievous error; he does not intend to let the campaign get out of his, or Robert's, control.

- **Identifiable**—In the wake of any revolutionary realignment of a national political party, new people of importance rise to the top. Most in the new Democratic setup are now identifiable.

They include labor's top political operators—such men as Alex Rose, a power in New York's Liberal Party, Walter Reuther of the United Auto Workers, and Pres. George Meany of AFL-CIO. And there's a group of governors who got on the Kennedy bandwagon early and stayed there—G. Mennen Williams of Michigan, Michael DiSalle of Ohio, Abraham Ribicoff of Connecticut, and Herschel Loveless of Iowa.

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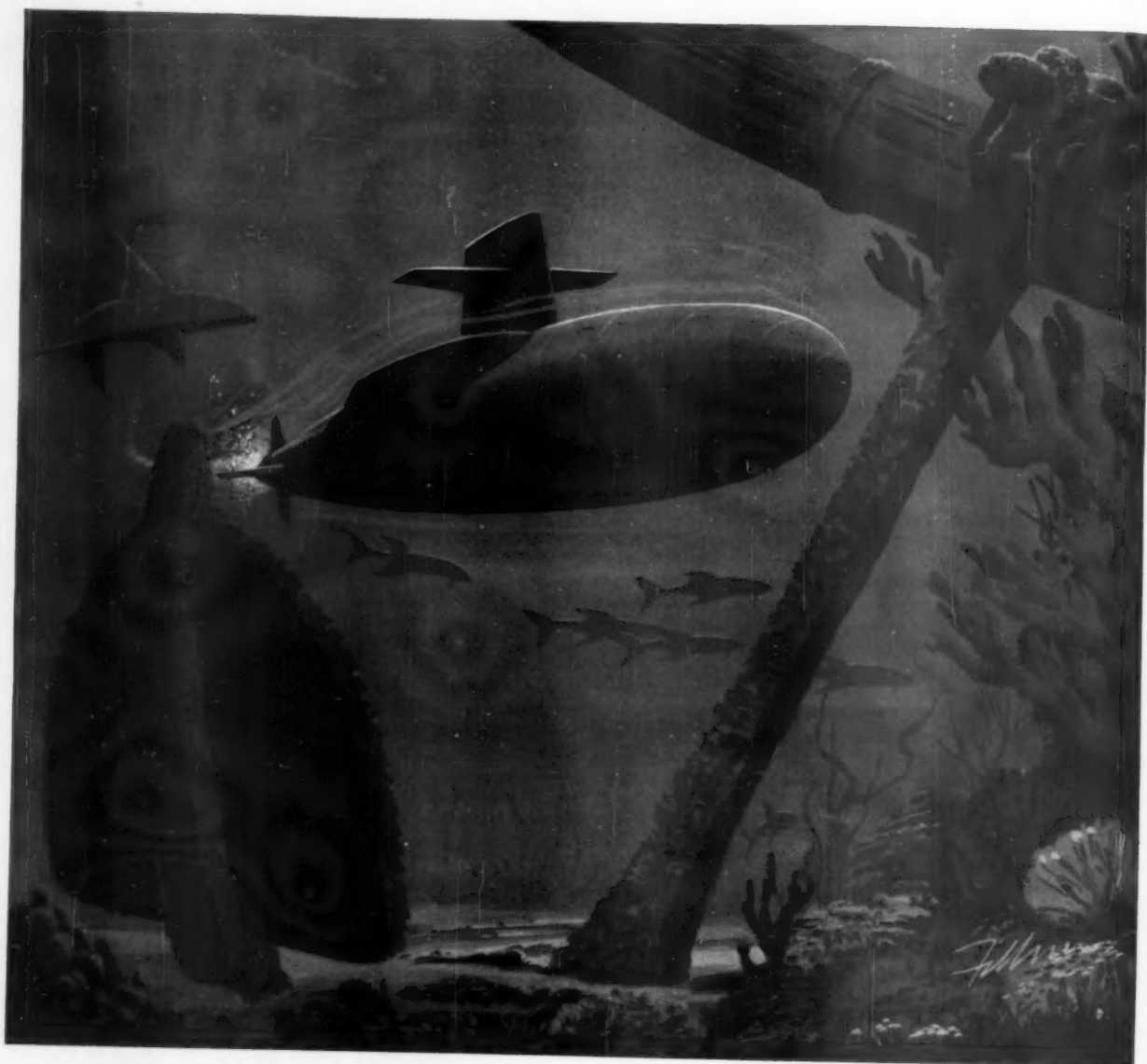
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With our present technology, finding a submarine in a vast expanse of ocean is like trying to find a lost coin in Grand Central Station! And when a sub *is* located, it must be correctly identified and continuously monitored. If it proves to be unfriendly, we must determine what threat it poses and how to defend against that threat.

Advanced electronics holds the key to this problem. Hughes, a national leader in electronics, is working with the U. S. Navy in developing entirely new submarine defense systems.

This is not a problem that can be attacked piecemeal. The final answer must be the product of *many skills* and studies which must be completely integrated into a *workable whole*.

Right now Hughes engineers are investigating such areas as acoustic array systems, radar and infrared systems, magnetic anomaly systems, complete command and control systems, signal recovery techniques, and human factors.

Hughes is uniquely qualified for this job because of its ability to integrate many skills into a workable whole. Some of the successful electronics systems developed by Hughes include airborne electronics

systems which control a jet plane's entire mission, Falcon air-to-air guided missiles, and three-dimensional radar systems (the most important advance in the field since the invention of radar itself).

Electronics is our business—Hughes is one of the Free World's most important producers of advanced electronics components and systems for military and commercial applications. This position has been built on creativity, productivity and reliability. We will welcome your inquiry about any of our services or products.



Data processing systems, such as the one shown here, have been developed by Hughes Fullerton engineers to collect, analyze and display vast quantities of information on a scale hitherto impossible.

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Dead Letters on the Phone Dial

Bell System expects to run out of phone numbers in the early 1970s. So it is replacing the traditional letter-digit combinations with all-number calling.

"For there is a hardness of heart as well as of head in snatching the poetic connotations of KLondike and TUXedo and PROspect away from the telephone user and giving him in their stead a combination of digits from one to 10."

"And what is so wonderful about the assinine prefixes the phone company has managed to invent over the years? What is so fine about Underhill or Exbrook or Davenport or Graystone? . . . all-number calling should be welcomed here."

These conflicting viewpoints appeared, respectively, on editorial pages of the San Francisco Chronicle and the Nevada City Nugget. They were written in reaction to the Bell System's announcement that phone numbers consisting of seven digits eventually will replace the traditional prefix-plus-five-digit numbers.

Actually, there has been little reaction as strong as that of either San Francisco, a city in love with its traditions, or of Nevada City, Calif., which wants to show that it is all for progress. Most people feel that all-number calling (ANC) is merely an unpleasant necessity. And this is how Bell feels about it, says Joseph Crotty, customer relations supervisor of the Bell System parent company American Telephone & Telegraph Co.

• **Running Dry**—The first two letters and the first digit of a phone number designate the central office; the next four digits, the particular phone. To be a proper prefix, the two letters you dial have to begin a word or name in the English language, such as FOrest or OXford. This eliminates a considerable number of possible letter combinations, such as XJ or VL. Also, the letters on a dial are grouped in clusters of three around the holes corresponding to the numbers two through nine. So you can't use the 1-hole or 0-hole to dial a prefix.

With more and more people ordering phones, and more and more central offices needed to service them, the telephone companies figure that by the early 1970s they will run out of new letter-number combinations.

By replacing the two letters with two digits, Bell figures it can open up enough new combinations to keep the well from running dry until at least the year 2000.

• **Pioneers**—The wheels of change are

already turning within the network of affiliate companies under AT&T. Wichita Falls, Tex., was first; it went over to ANC two years ago. A number of small communities followed, including Casper, Wyo., Council Bluffs, Iowa, and Newhall, Calif. As for major cities, Atlanta began a changeover in June; Chicago and Omaha are slated for next fall. But it will be about 10 years before ANC is in effect nationwide.

• **Some Squawks**—Bell doesn't expect too much trouble in getting the public to accept ANC. Of course—as with any proposals for change—there will be a number of complaints. For instance, many people feel that stripping away all personality from phone numbers is another step toward a world controlled by electronic computers. (That the old phone numbers have personality has been proved by the fact that Glen Miller once wrote a tune called Pennsylvania 6-5000; it's doubtful that he would have been inspired to write one called 736-5000.)

Another complaint might rise from the fact that in some areas even a phone number can be a status symbol. If a New Yorker tells you his phone exchange is Plaza, you know at once that he lives in the fashionable East Fifties.

The most frequent complaint is that it's harder to remember seven digits than a name and five digits. Bell has psychologists working on this one. They insist that it isn't harder for short periods of time, and nobody remembers phone numbers for very long anyway.

Direct-distance dialing is another factor making telephone numbers look more mathematical. Inaugurated in 1952, and now extended to about 50% of the nation, it permits you to place a long distance call without an operator by dialing a three-digit "area code" followed by the party's number.

It's well worth the additional dialing burden—Bell says the time it takes to place a station-to-station call has been cut to a quarter of what it used to be.

Of course, with direct-distance dialing plus ANC, you would have to dial a formidable sequence of ten digits to make a long distance call. However, Bell says its studies indicate that it is easier to remember ten digits correctly for a short period of time, than it is to remember three digits, make a mental switch over to two letters, then back to five more digits.

• **Computers That Remember**—Bell is

trying to provide the public with some relief from increasingly complex dialing. Engineers at Bell Laboratories in New Jersey are hard at work on electronic equipment that will remember phone numbers.

One method being tested works like this: Each subscriber would give the phone company a list of the local and long-distance numbers he calls most frequently. The company would program the numbers into a computer-like electronic switching system at the central office. To reach any number on the list, the subscriber would dial only one or two digits. This would signal the system to hook him up to the right phone. But this is still in the future.

Somewhat similar is the automatic dialer, which is attached directly to a phone, instead of located at the central exchange. A small box contains a list of numbers on, say, punched paper tape. The subscriber simply punches a button corresponding to the desired party's name, and the box does the dialing. A couple of these, made by private companies but compatible with Bell equipment, already are on the market, and Bell is developing its own models.

Bell labs also have prototype models of telephones with a 10-button keyboard like an adding machine. This would make dialing faster and more accurate.

• **Evolution of Dial Phone**—The telephone number has a historical background of its own. Its evolution parallels the history of population growth and urbanization in the U.S. The first telephone directory, issued in New Haven, Conn., in 1878, had no numbers; it simply listed the names of people and the companies that had phones.

Towns grew, more and more people bought telephone service, and it wasn't long until the phone company had to assign numbers to maintain efficient service. But the number of subscribers in a town was still small enough to be serviced by one central office. The second New Haven directory, for example, listed phones with numbers between one and 1,000.

As the number of subscribers continued to expand, the capacity of one central office—something under 10,000 phones—was exhausted. So branches had to be built. Of course, there had to be some way to distinguish between different offices in the same city.

This, along with the invention of the dial, brought us to the prefix-digit system of today. And now, that has just about run its course.



Two Roads

At this very moment, certain key executives are wondering which is the right road to take in regard to machine tool replacement.

For such men, here's food for thought.

The road that *seems* easier to take isn't easy at all. It involves going along with current "useful" equipment that no longer turns a profit. This road soon dips downhill, and ends in a bog.

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Navy Cancels Program for Corvus, Missile for Carrier-Based Planes

The Navy has canceled its program for development of the Corvus, a supersonic missile for use by carrier-based planes with a 100-mi. range and a highly sophisticated guidance system for homing on its prey. The prime contractor was Temco Electronic & Missiles Co., which a week ago became a division of Ling-Altec Electronics, Inc.

Some \$80-million has already been spent on the project, whose completion would have cost \$450-million altogether. Corvus accounted for 15%-20% of Temco's backlog; the company said it expected to absorb most of the key personnel in other jobs, but would make no guess on the effect on the company's total employment of 6,000. Subcontracts are being canceled with a large number of companies.

Navy funds formerly allocated to Corvus will probably be used for the development of Raven, a somewhat similar missile with a much longer range—500 mi.

• • •

Pemex Head Confirms Negotiations With TGT for Gas Pipeline in Mexico

Pascual Gutierrez Roldan, head of Petroleos Mexicanos, has confirmed that the nationalized Mexican oil industry is negotiating with Tennessee Gas Transmission Co. to set up a pipeline in Mexico that would carry Texas and Mexican natural gas to California (BW—Jul. 9'60,p30). Roldan said no contract had been signed yet because both countries were studying the legal problems raised by the 450-million-cu.-ft.-per-day pipeline. A top TGT official agreed that "TGT is negotiating with Pemex as indicated by Roldan's statement." He added that TGT had not filed any application with the Federal Power Commission, and has no immediate plans to do so.

• • •

Antitrust Suits Hit Two Companies In Centralized Local Credit Service

Antitrust suits were filed this week against Central Charge Service, Inc., of Washington, D. C., and Charg-It of Baltimore, Inc. Both companies are in the mushrooming business of local centralized credit service; they discount sales checks of their retail merchant members, then bill and collect from individual customers.

The Justice Dept. based its charges on:

- Exclusive dealing contracts, which it claims were forced on the merchant members to block off competitors.
- The dominant local position of each company.

Central Charge's volume is only \$12-million, and Charg-It's \$6-million, but faced slim local competition until last year when Seaboard Finance's new International Charge plan opened branches in both cities.

Government lawyers stressed that suits were aimed at particular situations, not at central credit companies in general, or at all exclusive dealing contracts.

The antitrusters scored another victory last week when Gamble-Skogmo, Inc., sold its stock interest in Western Auto Supply Co., another big retail chain.

The Justice Dept. had brought suit in April charging that by 1958 Gamble-Skogmo had gained control of Western Auto by acquiring 1,267,000 shares, or 41.8% of its stock.

Procter & Gamble Co. has bowed to a Federal Trade Commission order forbidding it to sign exclusive contracts by which manufacturers of automatic washing and dishwashing machines pack samples of P&G soaps and bleaches in the machines.

• • •

ICC Rulings Due in Three Cases Of Selective Rail Freight Rate Cuts

Within the next week, the Interstate Commerce Commission is scheduled to come up with decisions on three important cases testing whether the railroads have the power to make selective cuts in freight rates to meet competition.

The cases involve shipments of phosphate rock from Florida to southern points, of sugar from New Orleans to Chicago, and of tinplate from the Pittsburgh area to St. Louis. In each case, barge operators challenged rate cuts by the railroads; they cited testimony before Congress by ICC Chmn. Winchell to the effect that the railroads could not cut rates selectively if this forced water carriers to drop their rates to an unprofitable level.

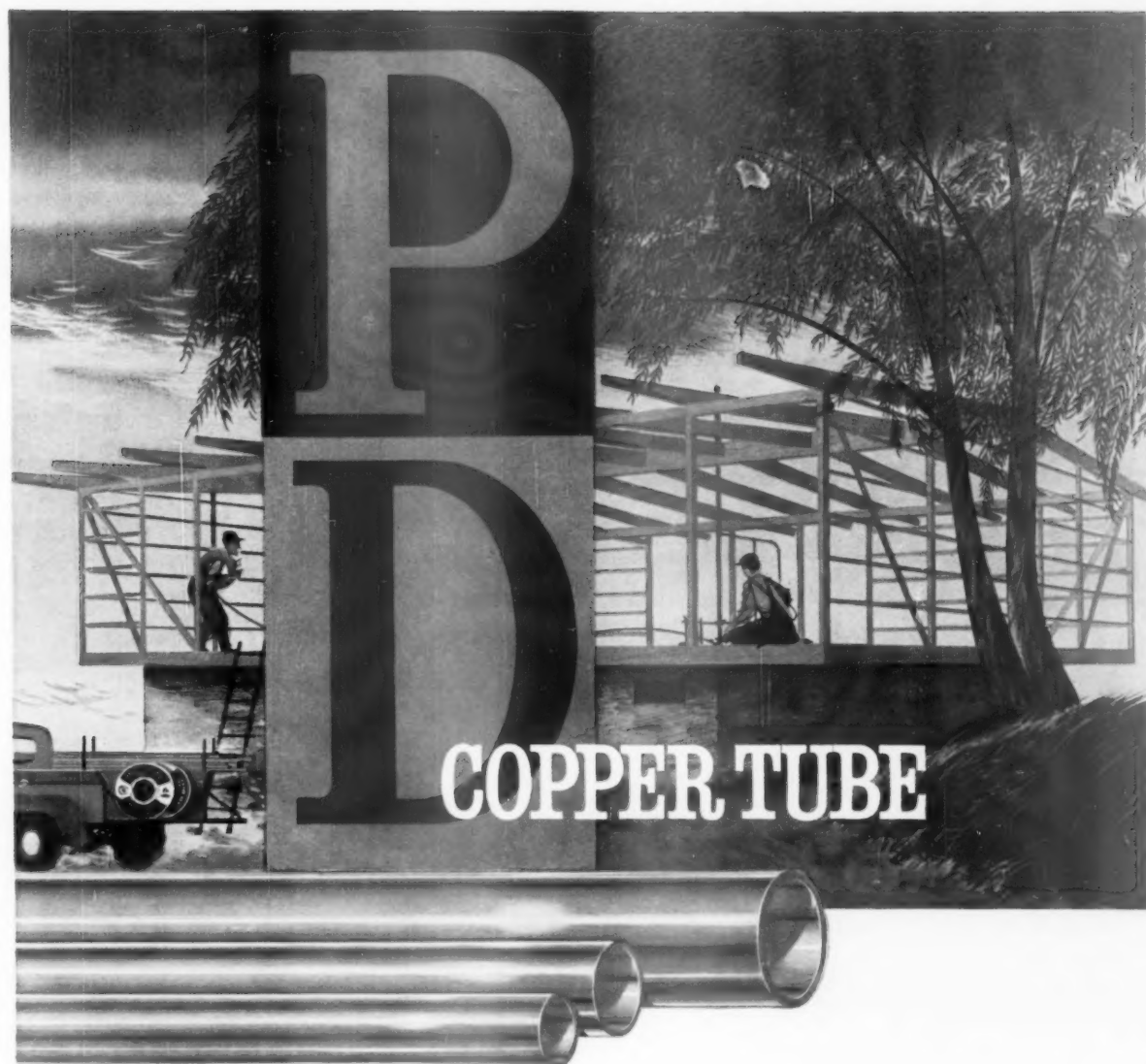
Meanwhile, the Chicago & Eastern Illinois RR charged that ICC had acted illegally when it canceled joint rail-water rates offered by C&EI on coal shipped from mines in Illinois and Indiana.

Fifteen major Eastern railroads have asked ICC to approve boosts running up to 5% in passenger fares, to go into effect Sept. 1. The increases one-way would not exceed \$1 on coach fares and \$2 on first class; on round trips the ceiling would be \$1.70 and \$3.60. Commuter fares would not be affected.

• • •

Another Top Man Quits at J. I. Case

J. I. Case Co., Milwaukee maker of farm and industrial machinery, lost another top man this week when Executive Vice-Pres. John H. Brinker resigned. Brinker was hired only last fall (BW—Nov.14'59,p175) by the then president, Marc B. Rojzman, who quit this year in a dispute over growth policy (BW—Apr.30'60,p54). Brinker said that there was no connection between his quitting and Rojzman's.



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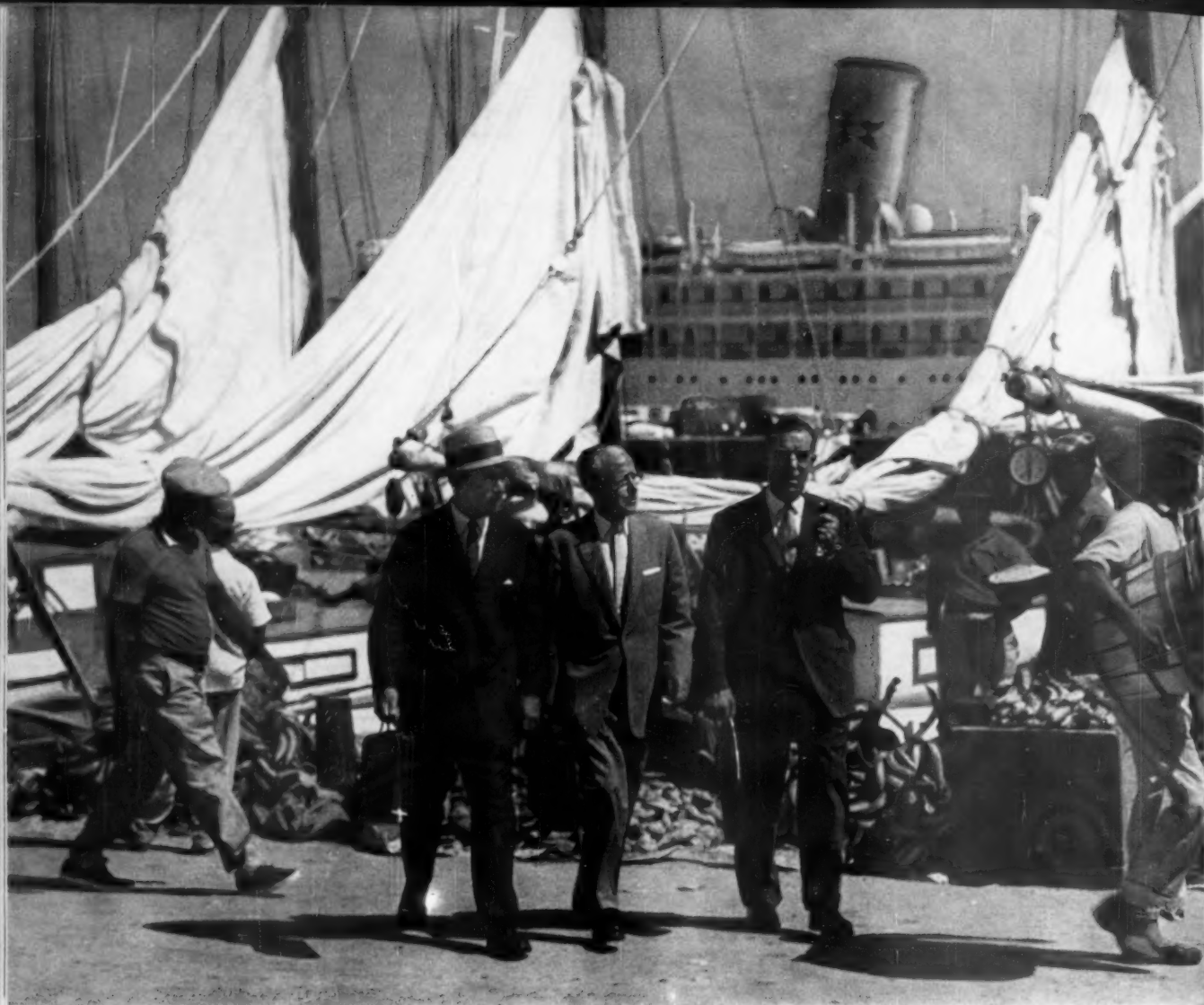
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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
JULY 23, 1960



Leaders of both parties fear the August session of Congress.

It will be full of pitfalls for every candidate, from Nixon and Kennedy down to the newest member of the House. And there's little chance for constructive legislation.

If there's any gain to be had, the odds favor the Democrats.

When Kennedy picked Senate Majority Leader Lyndon Johnson as his running mate, he was making a pitch for a united, disciplined Democratic performance in August.

Johnson's job is to bring the Southern Democrats into line.

The kind of social legislation Kennedy hopes the August session will produce doesn't stand a chance if Southern conservatives continue their long-standing working agreement with the Republicans.

Johnson, backed by Speaker Rayburn, hopes to convince the Southerners that their best hope lies in making a good August record to help Kennedy in the race for the White House. With their eyes on the strong civil rights plank in the platform, many Southerners are going to be hard to convince.

Kennedy wants to use the August session to embarrass Nixon.

Kennedy thinks this can be done by pushing through a \$1.25 minimum wage bill, medical aid for the aged under Social Security, federal aid for education, and possibly a generous housing aid bill.

If these bills draw vetoes, the Democrats won't be unhappy. They think Nixon will be under a severe handicap in the campaign if he has to start by explaining a string of August vetoes.

Kennedy is also talking about pumping quick cash to farmers. The idea is a bill that would increase federal payments for soil conservation practices between now and Election Day on the grounds that there is an "emergency" in farm areas.

This would be sure to draw a blast from Eisenhower.

There's also a chance that the Kennedy-Johnson team will try to promote another \$2-billion or \$3-billion to speed up missile production and missile base construction.

—•—

All this poses new problems for Nixon.

He's getting conflicting advice about how to meet the Kennedy-Johnson attack.

Nixon's original idea was to keep the Republicans and Southern Democrats working together in August to block some legislation and tone down the rest to a point where Eisenhower would accept it. Nixon—like Kennedy—was particularly interested in a housing bill, minimum wage, and medical aid for the aged.

The theory was to get bills signed, robbing Democrats of issues.

He had the active support of the Nixon group in the Administration, chiefly Labor Secy. Mitchell and Health Education & Welfare Secy. Fleming. They have favored moving a little toward the Democratic position even if it means somewhat higher federal spending.

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
JULY 23, 1960

This theory is being challenged.

The opposition is coming from old Eisenhower hands in the Administration who want to hold the spending line no matter what the cost in vetoes. Treasury Secy. Anderson, Budget Director Stans, and Agriculture Secy. Benson share this view.

Their thinking runs something like this: No matter how skillfully Nixon tones down Democratic proposals, the outcome will never satisfy the backers of reform legislation or win many votes; the Democrats, with their heavy majorities in Congress, will get the credit for whatever the session accomplishes anyway; and every backward step the GOP takes on spending weakens the "fiscal responsibility" image of the party.

They want to make the budget the prime issue in the campaign.

A struggle for Eisenhower's backing is shaping up.

Nixon, even with the added stature as the party's nominee, wouldn't do more than suggest to Eisenhower what legislation he thinks should be signed or vetoed. But Nixon aides hope Eisenhower will catch some of the spirit of the coming campaign when he flies to Chicago next week to make his convention speech, and that he will come back to Washington prepared to give a little when it comes to accepting new legislation.

But Eisenhower may be moving away from the Nixon strategy.

The word from the vacation White House at Newport, R. I., is that Eisenhower is grimly preparing for a last-ditch fight with the Democrats in August—one to be devoted largely to a defense of his budget.

He summoned Anderson to Newport for an unusual Sunday conference. They talked about the stiff message that Eisenhower is planning to send Congress warning against temptations to curry voters' favor with election-year spending.

Eisenhower is pictured as being concerned about how far the Nixon supporters will go in this respect—not just with the Democrats.

Anderson is getting mileage out of the improved budget picture.

He carried advance figures to Newport and arranged simultaneous news releases there and in Washington.

The fiscal year ending last month wound up with a surplus of \$1.1-billion, five times bigger than the estimate given in January. Receipts were down \$200-million from the January estimate. But spending dropped more than a billion. The biggest cuts were in crop loans to farmers, payments to the Export-Import Bank, military assistance abroad, and in the cost of interest on the public debt.

AFL-CIO leaders are not warming up to Kennedy and Johnson.

They have postponed a meeting scheduled weeks ago for Aug. 17 that was supposed to wind up with an endorsement of the Democratic ticket, whoever might be on it (page 70).

But they don't trust Johnson—and want to keep a gun at his head.

If Johnson works hard enough to suit them for a \$1.25 minimum wage bill and for a medical aid bill inside the Social Security system, they may come through with an endorsement later.



BIRMINGHAM, Alabama, the geographic center of growing Southern markets, is the only place in the world where the three essentials for steel making (coal, iron ore and limestone) are found in commercial quantities. Long known for its steel products, Birmingham is now diversified industrially. Its 'Committee of 100' has attracted more than 225 new plants, warehouses, sales offices and service organizations during 1950-60. Its new 'Centennial Committee' composed of business, labor and government leaders is spearheading a 10-year progress plan. A \$2-million airport expansion is included in a \$31-million development plan. A \$50-million urban highway program is underway. A newly completed \$1-million Art Museum and a \$6-million Research and Medical Center further symbolize the modern Birmingham. OTIS has a long-standing "diversification" interest in Birmingham. Over 59% of its industrial and commercial elevators are the world's finest. They're by OTIS.



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energy source, allowing fast in-place coating plus the advantages of coating, curing and packaging in one continuous operation. Enjay serves leading companies in many different industries with a broad range of other quality chemicals and expert technical assistance. Chances are Enjay can meet your chemical needs, too. For more information or to order any Enjay chemical, contact the nearest office.

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ENJAY CHEMICAL COMPANY

A DIVISION OF HUMBLE OIL & REFINING COMPANY



PETROCHEMICALS

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Enjay pioneers in new materials for many leading industries and offers customers an unequalled range of technical and processing experience. Backed by one of the world's largest research laboratories, Enjay provides complete technical service...from initial development to finished end-product.

**OTHER ENJAY PRODUCTS
FOR INDUSTRY**

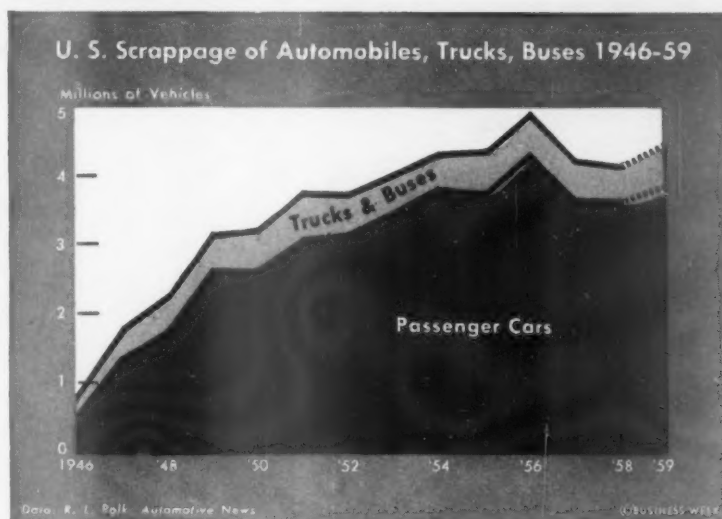
ADDITIVES. Enjay supplies a complete line of "prescription-balanced" additives to improve lubricants and fuels for today's cars. Examples: viscosity index improvers, detergent inhibitors and pour point depressants that help control motor oil flow under hot and cold conditions—and provide a new high in engine cleanliness and efficiency. New gasoline additives that reduce lead and carbon deposits, prevent stalling from carburetor icing and stop rusting in fuel tanks.

BUTYL RUBBER. Butyl can be compounded into a wide variety of products for automotive and industrial applications. These include super-traction auto tires, inner tubes, coated fabrics, electrical insulation and hundreds of other products where resistance to heat, ozone, weathering, tear, flexing and abrasion is necessary.

PLASTICS. Enjay markets Escon® polypropylene, a new plastic material for countless products made by molding or extrusion. Escon promises new and unusual applications in the packaging, household, appliance and automotive fields. The heat and chemical resistance of Escon, plus its high gloss finish, ability to withstand abrasion and hard usage, make it ideal for applications not possible before with other plastics.

ENJAY CHEMICAL COMPANY
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CHARTS OF THE WEEK

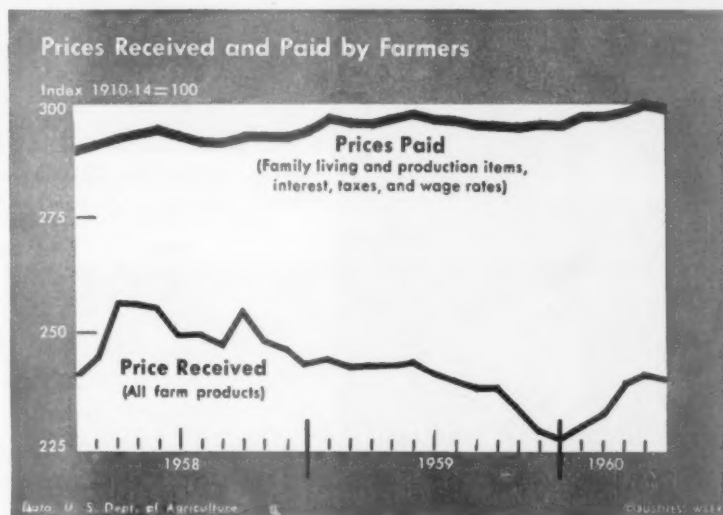


Near Record Scrap Heap

Americans junked almost 4.5-million cars, trucks, and buses last year, according to preliminary figures released by Automotive News. It was the second highest total in history, topped only by the 4.9-million discarded in 1956, and the seventh straight year that scrappage has exceeded 4-million vehicles. An es-

timated 3.9-million passenger cars and 580,000 buses and trucks gave up the ghost during 1959.

Scrappage tends to rise with sales. Compulsory inspection laws in 35 states, and annual programs like the National Vehicle Safety Check, have encouraged the retirement of wornout vehicles.



Price Squeeze Is Still On

The American farmer could draw small comfort from the slightly improved prices he received for his products during 1960, for he continued to pay higher prices for the goods and services he needs to subsist and run his farm.

Prices paid by farmers have ascended

steadily after a brief respite in mid-1959. They are now only a fraction below April's all-time high.

In December, 1959, prices received fell to their lowest level since March, 1956, and although they have moved upward this year, they have not even approached their record 1958 levels.

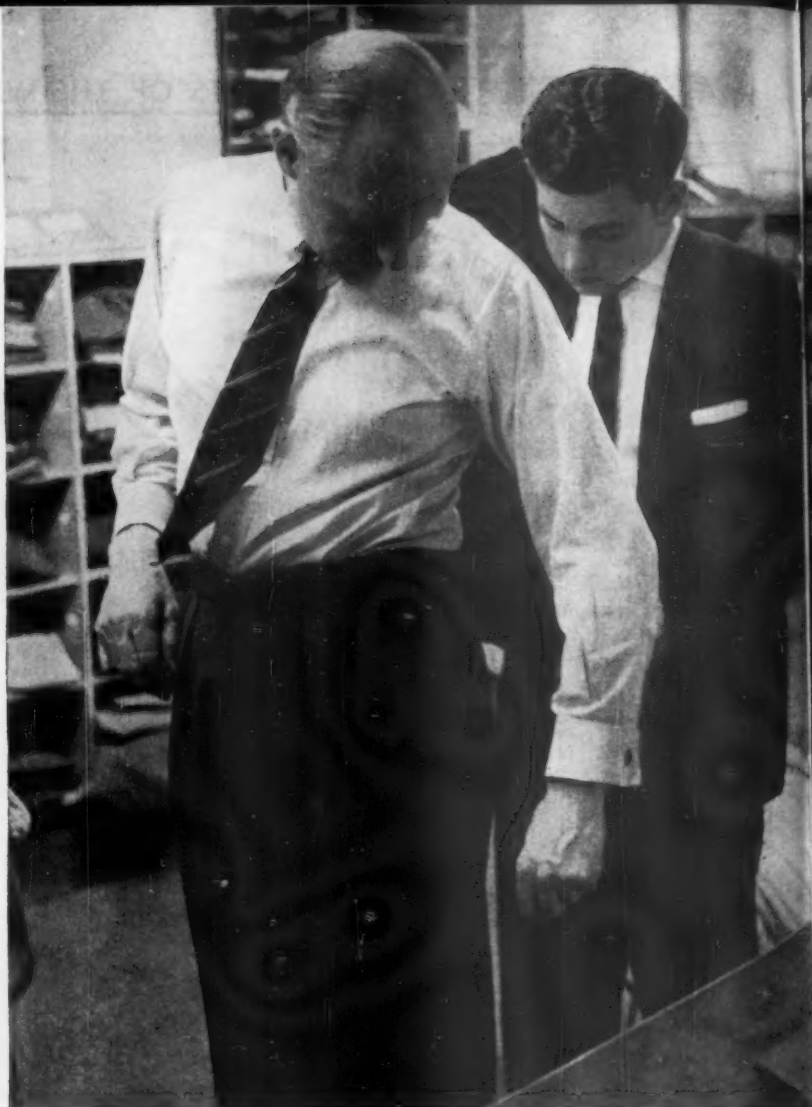
MARKETING



CHAIRMAN Simpson leaves his Piccadilly store, showcase for a profitable line of internationally known men's wear.



ENDOCRINOLOGIST Simpson has office in this building on Harley Street, London's famous row of doctors.



DAKS TROUSERS, rigged with a bit of elastic so they can be worn without braces or a belt, are the heart of Simpson's line of men's wear; Daks skirts are also made.

Top British Clothier

S. Simpson, Ltd., is headed by S. Leonard Simpson (pictures, left), medical specialist.

About noon each working day, S. Leonard Simpson, M.A., M.D., F.R.C.P., quits his offices at 77 Harley Street, London, steps into his maroon Rolls Royce, and moves over to Piccadilly to don the cap of board chairman of S. Simpson, Ltd. Here, with quiet aplomb, he preaches and practices the gospel of Daks, a dogma that has spread worldwide, from Singapore to San Diego.

The Daks mystique began some 25 years ago when a London tailor, Alexander Simpson, took several buttons, added a tiny stretch of elastic, designed

a pair of beltless trousers, and called them Daks. Since then, with notable persistence, Daks has dreamed up seemingly endless variations on the beltless theme—even to Daks skirts.

• **Doctor, Clothier—Chmn.** Simpson (who inherited the business on the death of his brother) has learned to mix oil and water. Half his working life goes to his practice as an eminent endocrinologist; the rest, to Daks.

Despite this incongruous mix, Simpson exudes an almost mystical faith in his products. Intellectually inclined, he compares Daks with the style of a great ballet dancer—brilliant but barely describable. He can say with the authority of a top clothier, "British men's fashions are taking a leading position everywhere."



GOLF EQUIPMENT is a lively sales sideline. Department builds traffic, reminds golfers of Daks' association with leisure apparel. Golf pros run classes in the store.



TWO AMERICANS critically appraise each other's choice of jackets. GI's were among first American customers for Daks.



THE MADISON BAR is a quick-lunch department of Simpson's Piccadilly shop, which also has a full-scale restaurant.

er to the U.S.

• **Big Plant**—The Simpson store near Piccadilly Circus is no more than a showcase for the Daks concept, he says quietly. Behind that showcase, three factories and 3,000 workers turn out the lines that have made Simpson Britain's top exporter of ready-to-wear clothes to the U.S.

In October, the company will put extra power behind its sales drive by adding a 500-worker wing to its plant near Glasgow. Most of the new output will head for the U.S., which accounts for one-third of its export sales.

Typically British, Simpson executives carry sales figures on scraps of paper in billfolds and discuss them only at hush-hush board meetings. But it's estimated last year's sales amounted to about \$16-million—up \$1.5-million from 1958. The



SIMPSON PICCADILLY is the London retail outlet for a clothing business that also includes three factories with 3,000 workers. Major expansion is scheduled for fall.

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Piccadilly store provided a healthy slice: around \$4.8-million.

• **Growing U.S. Sales**—Since World War II, overseas business has grown from almost nothing to some 35% of sales. The company set up Simpson Imports, Inc., in New York City in 1940, but real growth in the U.S. began in 1950. Today, U.S. sales are well on the way toward \$2-million annually. That's quite a record, considering that shipment of finished British clothes of all types were \$5.6-million last year.

At first, U.S. sales came slowly. "We battled for years," says Roy G. Warden, marketing director of S. Simpson, Ltd., "and finally broke the trousers barrier." Inadequate distribution—and, adds George G. Fanto, vice-president of Simpson Imports, inadequate output—barred fast growth. Then, too, the price is high. Daks trousers start at about \$30 here, suits at about \$115.

• **Against Tradition**—More than anything else, American tradition worked against Daks. Explains a London market researcher: "In the U.S., belts were a symbol of virility—you know, the western gun belt that made you a man."

"Americans liked casual wear with a \$200 crocodile belt," says Roy Warden.

In its early U.S. ads, Simpson avoided any hint of the stereotype umbrella-and-bowler Britisher; it wanted to make Daks look American. That proved a mistake. Simpson now treats export markets just like the home market.

"If you're an American," says Warden, "would you want to buy an American suit made in England? Our special feature is distinctive British clothing."

But some factors worked for Simpson. Postwar suburban living and leisure brought in smart casual wear. Tourists discovered in Piccadilly the Daks that the GI's had discovered earlier.

• **Different Approach**—Actually, British clothes have always borne a badge of distinction in U.S. eyes, says Fanto. The U.S. concept of mass production is this, he says: Sell a couple of suits a year and make them obsolete by style changes. The average Britisher needs five suits to be well dressed. He buys quality and style that will last several years. With the multiple-wardrobe base, he can buy one good suit a year—and still keep the manufacturers happy. And Americans are beginning to appreciate this approach, he feels.

Daks styling has changed over the years, but gradually. "I always describe it by saying it's the difference between the Duke of Windsor in the 1930s and the Duke of Edinburgh today," a Simpson executive says.

• **High Level**—In selling the U.S., the only criterion is to avoid the cheaper stores, Warden says. "We could sell more here if we wanted to," says Fanto. "But you can't really mass-produce quality the way the U.S. mass-produces.

Beltless trousers take special tailoring."

Eager for new markets, Simpson still is choosy. In New York, its customers include Saks Fifth Avenue, Altman, Lord & Taylor. But in the rich Texas market, Neiman-Marcus is missing from the list. Simpson refused to give it an exclusive contract in the Dallas area.

The Simpson line runs this way: We aren't selling; we're offering you the privilege of stocking the Daks line. "Simpson arrogantly—almost outrageously—assumes that Daks are desirable," a Britisher says.

• **Sartorial Mess**—Even in Britain, Simpson had a job to do in the early years. The trousers situation of the 1930s was nearly disastrous, executives report. For casual wear, an Englishman simply stripped off his suit coat and his braces, and held up his trousers by tying his club tie around his waist. "Whv, people were wearing plus-fours for golf, and for drinks afterward," an executive says.

The beltless trousers were the answer to this sartorial mess. Alexander Simpson boldly priced Daks (a name picked after a night-long discussion, because it sounded best) in the near-top brackets. Whereas gardening pants were selling for \$1.50 and expensive gray flannels for \$2.24, Daks sold at \$4.20.

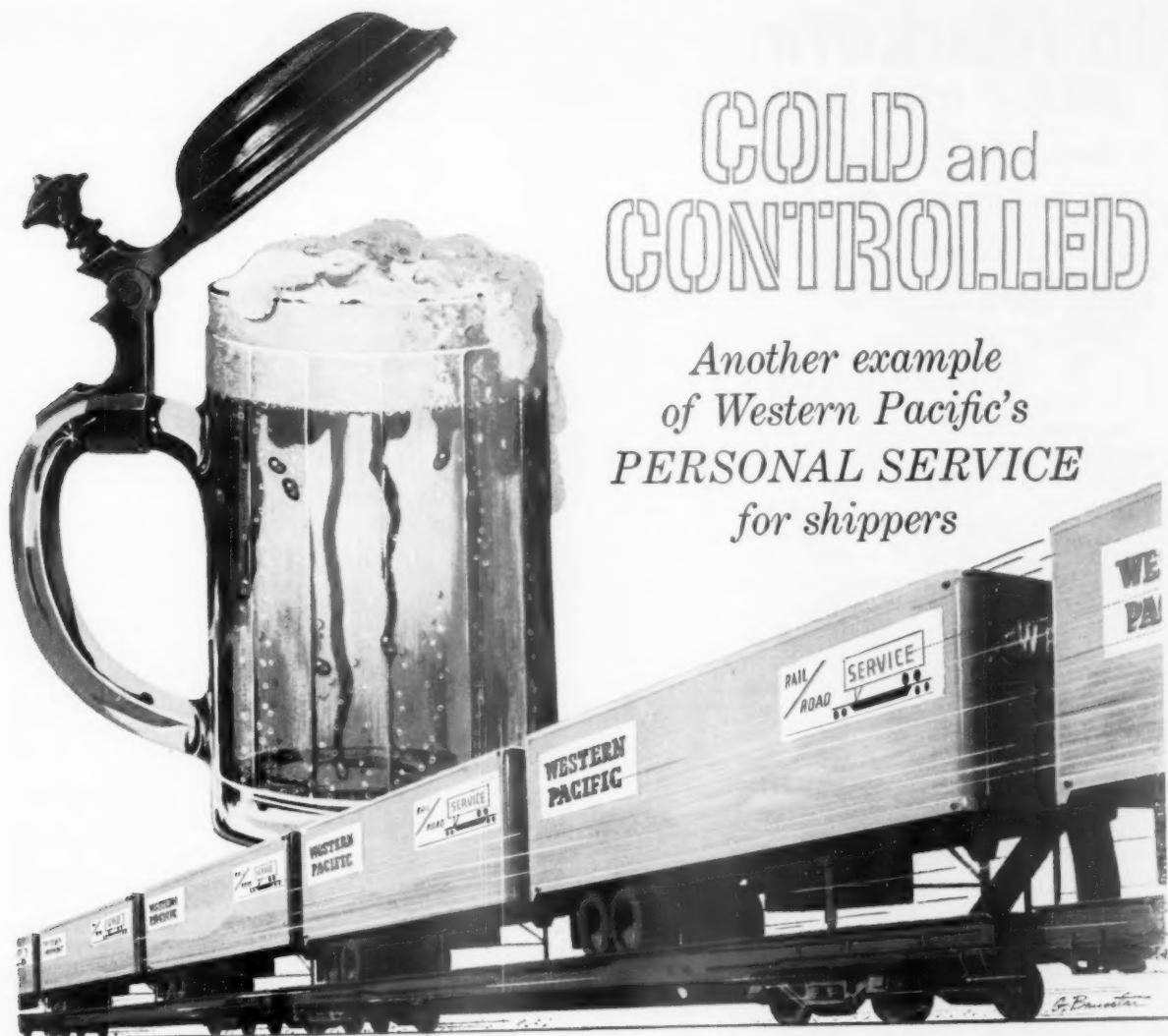
Daks caught on quickly in England, soon captured the Commonwealth. Alexander Simpson opened the London store "to show other stores how to display Daks." By 1950, wives were hounding husbands for Daks skirts, so Simpson started a skirt line.

• **Hewing to Line**—For all its snob appeal—Daks eschews synthetics, sticks to its own "featherweight worsteds"—the company has not lost sight of the good sales gimmick. In 1949, it organized the Daks professional golf tournament, with a £1,000 prize, big money in England. It invites sports pros to put on demonstrations, even to teach classes, in its store. It employs one man partly to cultivate British royalty.

By relying basically on one product, Simpson benefits from high-volume production. At the same time, it can focus on offering Daks in an enormous variety of British fabrics.

• **Decision-Making**—Chmn. Simpson seems to wear his managerial hat lightly. Yet he studies the charts—"you can't romanticize about facts," he says. "Colleagues" do most of the work, but Simpson makes the final decisions.

He sees no conflict between medicine and business. "It's traditional in English life that originality—even audacity of thought—coupled with some conservatism can be applied to any type of work." He is not an administrator, he adds. "I simply examine the administration machine—with all the personalities involved—and, taking the global view, reach decisions." **END**



COLD and CONTROLLED

*Another example
of Western Pacific's
PERSONAL SERVICE
for shippers*

The same rigid temperature controls maintained by West Coast breweries are now being provided by Western Pacific for the shipment of draught beer in kegs by "piggyback" between the San Francisco Bay Area and points in the Pacific Northwest. Insulated, mechanically refrigerated trailers, built to WP's specification and riding on high-speed, roller-bearing flat cars, keep the beer at precisely

the temperature (only two-degree allowable tolerance) specified by the breweries.

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ROUTE OF THE VISTA-DOME

California Zephyr



In Marketing

• • •

Temporary Price Cut on Typewriter Made Permanent by Royal McBee

Some companies have long worried about price cutting that has knocked profits clean out the window. Some, such as Benrus Watch Co., believe price chaos has hurt sales (BW—Jan. 3 '59, p45). Latest to do something about it is Royal McBee Corp. Last week, the company announced that a drastic test program aimed at curing the situation was going on a permanent basis.

The test started last December when the company whacked the suggested retail price of its Royalite portable from \$79.95 to \$49.95 in two test cities. Sales—not only of the Royalite but of its higher-priced portables—spurred. In January, Royal added two more cities, with the same results. In April, it placed the program on a national basis—but still temporarily—and put Royalite on fair trade.

Again, sales soared to “totals previously unheard of in the portable business.” So last week, a letter from W. H. Beckwith, vice-president, Appliance Div., to all Royal portable dealers advised that the test program was official policy until further notice.

The company concedes that few dealers achieved the \$79.95 price in actuality, and the 25% dealer profit that the lower price brings nets him considerably more dollars than he had been getting.

The company is convinced that there's not much wrong with sales that realistic pricing and profits won't cure. But it warns that dealers who promote or sell at less than the new fair-trade price run the risk of losing their franchises.

• • •

In Toughest Action Yet, FCC Picks Up TV Licenses in Two Influence Cases

Congressional exposure of influence-peddling in the award of TV licenses culminated last week in the toughest regulative action in the history of the broadcasting industry. The Federal Communications Commission took away the multimillion-dollar license for Channel 10 in Miami and opened up Channel 5 in Boston for reconsideration.

In both cases the commission went beyond the recommendations of its own special hearing examiner and took the sterner course recommended by the Justice Dept. The action appeared to herald an era of stricter regulation under the new chairmanship of Frederick C. Ford. Never before have licenses been taken away on the ground that improper influences figured in the award.

In Boston's Channel 5 case, FCC took away the Boston Herald-Traveler's TV license but is letting the newspaper continue operation while the whole case is reviewed. The Herald-Traveler is not disqualified from seeking a renewed license, but FCC acknowledges that it will have a black mark against it in competition with other applicants.

The tougher path down which Chmn. Ford is leading the FCC may bode well for WHYY, Inc., one of the applicants for Channel 12, Wilmington, Del. This is one of the juiciest plums the commission has to award, because its signal reaches deep into the rich Philadelphia market.

WHYY is a non-profit educational station. This is the first time an educational station has competed directly against commercial stations. Other applicants for the channel are National Telefilm & Theaters, Inc., Metropolitan Broadcasting Corp., Rollins Broadcasting Corp. (which already owns a Wilmington radio station), and Wilmington TV Co., Inc., a group made up of owners of radio stations in Illinois and Arkansas.

But with FCC very conscious of being in the public eye, the commercial applicants think they have a tough fight on their hands.

• • •

“American” and “Amoco” Names Are Both to Be Used for Gasoline

Following the reorganization of Standard Oil Co. (Indiana), with American Oil Co. holding the operating reins on the domestic front (BW—Jul. 16 '60, p97), American Oil announced it would sell gasoline under the name “American Regular” everywhere, including Indiana's home territory. On premium gasoline, it will use “Amoco” for American Oil's territory, “American Super Premium” in former Indiana and Utah Oil territory.

However, Indiana territory stations—though not the gasoline—will still sport the “Standard” emblem to protect the company's interest.

Also to protect the “American” label, the companies have bought two concerns using the American name, have bought the name of a third company, and have options to buy the names of four others.

• • •

Mergers in the Marketing Area

Last week saw a spurt of merger moves by marketing oriented companies:

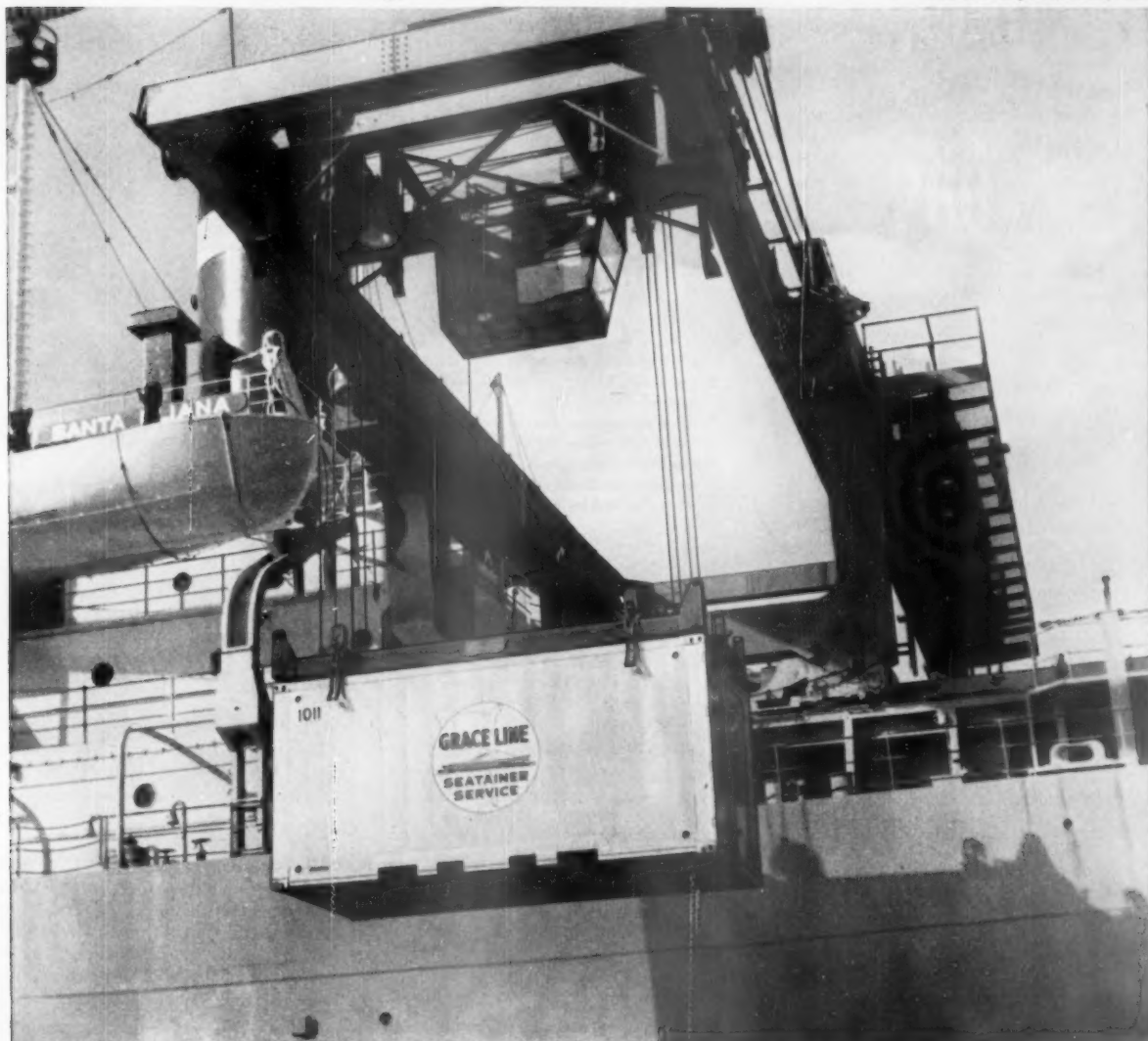
Automatic Canteen Co. of America, a major vending machine company, moved toward a vertically integrated operation with the purchase of **Nationwide Food Service, Inc.** Nationwide Food currently does about \$25-million a year in industrial and institutional feeding.

U.S. Tobacco Co. continued along the diversification road, currently popular in the tobacco industry, with its acquisition of **Lummi & Co.** Lummi, old-line Philadelphia processor of packaged nut products, has annual sales of \$6.8-million.

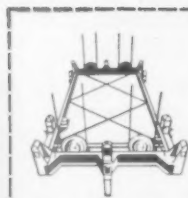
The **John B. Stetson Co.** announced the purchase of the **Frank H. Lee Co.** For the Philadelphia hatmaker the acquisition of Lee, whose annual sales run around \$5-million, mostly means a horizontal expansion in the mens' hat field. But company officials noted that the move should give Stetson greater market coverage since Lee's price range starts lower and its lines are sold through different retail outlets.

Automatic handling of containers
is the Big Idea whose time has now come.
The National *Speedloader* System
is its Big Name.

Photo courtesy Grace Line, Inc.



Transportation Products Division



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REGIONS

Houston's Texas-Size Land Grab

Booming cities pressed for land have long looked jealously at the liberal laws that permit Texas municipalities to annex more land more easily than cities in any other state. Last month, the Texas spree reached the zany level when Houston staked claim to 1,080 sq. mi.—an area more than double that of Los Angeles, now the nation's largest city in size.

Houston pulled off its latest attempt at land grabbing to stop a flurry of annexations among its neighbors in Harris County (map), but in doing so it seems to have turned up the heat that in recent months has been applied to the legislature to tighten the laws.

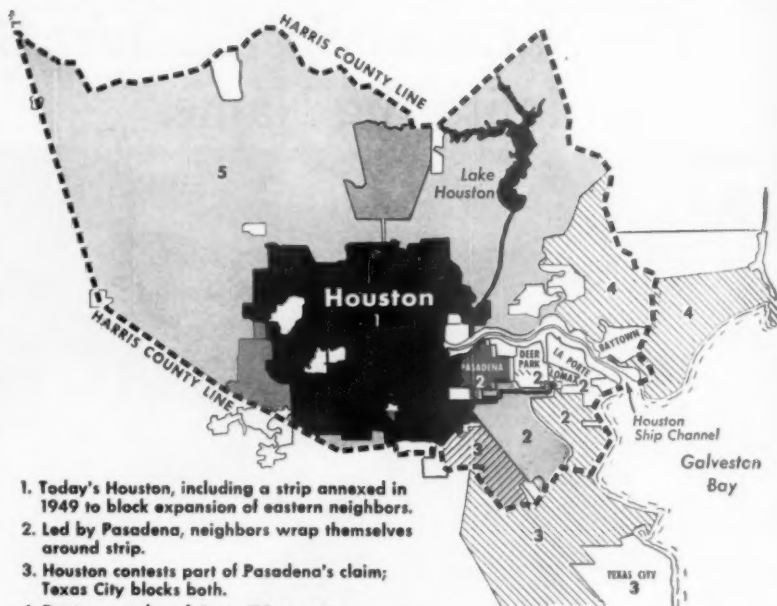
Cities usually have good reason for annexation. Other than providing for their own growth, they may want to squelch blight and hazards on their fringes by extending zoning, fire, and other services out there. They may want to avoid the "metropolitan problem" of too many governments by inhibiting the incorporation of new suburbs.

- **Ways and Means**—Depending on how eager they are to help their cities accomplish these things, states vary in the obstacles they throw in the path of annexation. They may require consent of the people in the affected land. They may provide panels to arbitrate disputes. They may set a certain degree of contiguity as a condition.

- **Texas Law**—Texas asks only one thing of home-rule cities that want to take in unincorporated land: It must be adjacent. Otherwise, cities can write their own rules. As a result, most of them don't bother asking for consent from residents or property owners of the land involved. Some hold a referendum of their own voters, but a larger number simply have the city council pass an ordinance on two or three readings.

That's how Houston has grown to its present size. After the war, it took in subdivisions until by 1950 it contained 161 sq. mi. In 1956, it annexed another 188 sq. mi. in two swipes—a coup that exceeded even Los Angeles' annexation of the 170-sq. mi. San Fernando Valley in 1915. It was Houston's only important annexation of the 1950s, but it was enough to help boost it to sixth among U.S. cities in population (BW—Jul. 2 '60, p. 25) and with 349 sq. mi., second only to Los Angeles' 458 sq. mi.

- **The Big Grab**—The outburst among the suburbs that finally provoked Houston to its big grab began June 6 on the fabulously industrialized south side of



1. Today's Houston, including a strip annexed in 1949 to block expansion of eastern neighbors.
2. Led by Pasadena, neighbors wrap themselves around strip.
3. Houston contests part of Pasadena's claim; Texas City blocks both.
4. Baytown stakes claim to 110 sq. mi.
5. Houston retaliates, claiming all unincorporated land left in county. (Areas in dark gray were claimed by Houston earlier this year.)

the Houston Ship Channel. In 1949, Houston had tried to block the four towns there from expanding to the south by annexing a sliver of land stretching across their southern boundaries. In June, Pasadena persuaded the others—Deer Park, Lomax, and La Porte—to retaliate. Eager to grab off a big hunk of land south of the sliver, Pasadena got the others to let it annex strips to touch it. The strips would wrap around Houston's sliver the way a bun wraps around a hamburger patty. In the deal, each city gained by taking some land from another or taking unincorporated land; but Pasadena wound up with the most, 76 sq. mi.

- **Counter-Claim**—On June 17, Houston struck back with a counterclaim for 32 sq. mi. of the land Pasadena wanted (Texas City, meantime, reached out to block both of them by annexing from the south). If Houston should win the right to the land and pass some other annexation ordinances on final reading, it would grow to 460 sq. mi. vs. 458 for Los Angeles.

By June 22, the fight for the industrial riches and potential of eastern Harris County spread north of the Ship Channel when Baytown, a city of only 15 sq. mi., first-read an ordinance for 110 sq. mi. that took in the huge Humble Oil refinery and a tract optioned by Jones & Laughlin Steel Corp. The same day, neighboring Highlands followed nearby Channel View with a

petition to incorporate as a city.

That night, the Houston council decided to grab all the remaining unincorporated land in the county—1,080 sq. mi.—by passing an ordinance on first reading. Amid complaints that Baytown would win the new industries that Houston would attract with a new water reservoir, councilman Bill Ragan led a majority to safeguard "Houston's destiny." Mayor Lewis Cutrer, one of two who opposed the move, called it "preposterous" and said the action would invite the legislature to strike back.

- **Chain Reaction**—Despite Ragan's day-after assurance that he really didn't intend for Houston to take in all that land, the mayor's point seemed to be on the mark. Just that week, a committee of the Texas Legislative Council was holding a hearing in nearby Beaumont in a study of annexation practices that the legislature had asked it last year to make. The Harris County shenanigans figured in the hearing.

The legislature called for the study after hearing enough complaints: Cities were annexing land before they were ready to serve it. Or they would pass ordinances on first reading, wait indefinitely for the last—preventing the communities from incorporating and other cities from annexing them first. A chain reaction of defensive annexations and incorporations was set off. Farm land was annexed unnecessarily. Self-contained industries were annexed in vio-

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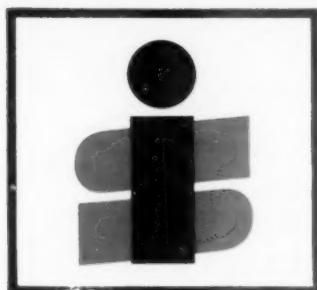
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Over **23,000** route
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in **24** states



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lation of agreements that they wouldn't be.

• **Stiffer Laws**—It's fairly sure that the committee will propose stiffer laws, but its views on this won't jell until after further hearings and contemplation. It's likely they will be along these lines: Fix a deadline by which cities must provide services for newly annexed areas, establish ground rules against wanton annexation of farmland and industries, perhaps establish a panel of judges (as in Virginia) or administrators to umpire annexation matters.

Once the council endorses the committee's proposals and whips them up to the legislature in January, as expected, their chances of passing are rated the best in years. "It could be that some cities have overreached themselves and lit a fuse for the legislature to act," said John M. Claunch, Southern Methodist University government professor. William A. Olsen, counsel for the Texas Municipal League, expects some "safeguards" to pass as a consequence of some cities' abusing their annexation powers.

Moreover, Austin observers note that the alliance of farm and small town legislators next year will be stronger than in ensuing years because the legislature must be reapportioned to reflect the new census figures.

• **Irony**—In all this, there is a measure of irony. Just as Texas appears on the verge of tightening its annexation laws, the American Municipal Assn. has come out with 18 "basic principles for a good annexation law" that are roughly as liberal as is Texas practice. The irony lies in the fact that just as AMA is prodding other states to be more liberal, Texas is moving in the opposite direction.

REGIONS BRIEFS

Grace Line got permission from the Maritime Board to withdraw its ships from St. Lawrence-Great Lakes-Caribbean service after Grace "had satisfactorily established" that it has lost money on the route and in the future would, at best, "not make a reasonable profit." In 15 sailings last year, Grace figures it lost \$1.2-million. This year, it didn't even sail up the St. Lawrence once. It blamed the loss of the Cuban market, "unstable" freight rates, Seaway lock delays, and port labor.

• Baltimore's Charles Center project has been promised \$13.4-million in federal aid by the Urban Renewal Administration. Originally, the city and private capital were going to finance the \$127-million rehabilitation in the city's business district, but in February it was decided to ask Washington for help.

A REPORT TO MANAGEMENT ON HOW

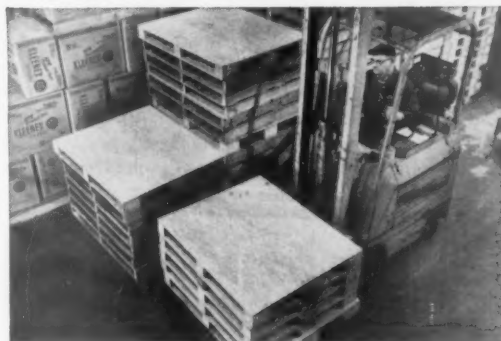
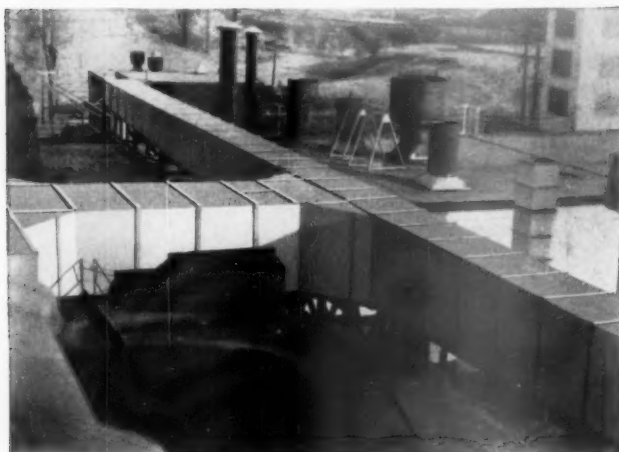
Industry cuts costs with FIR PLYWOOD

ROUTE TO:

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- ☐ PRODUCTION _____
- ☐ SALES _____
- ☐ PURCHASING _____
- ☐ MAINTENANCE _____
- ☐ CONSTRUCTION _____
- ☐ _____



Fir plywood building components cut costs and speeded construction of this 50,000-sq.-ft. International Paper Co. plant, Auburndale, Fla. Giant plywood box girders support stressed skin roof panels, which incorporate ceiling, framing and roof decking. Panels are paired to form a peaked roof over each 40' bay, providing large clear floor areas. Exterior walls are overlaid fir plywood, which needs no finish and virtually no maintenance. Construction with light, strong, prefabricated plywood components kept over-all costs to \$7.54 psf. The entire structure was completed in only 154 working days.



Switch to plywood from lumber for pallets at West Coast Grocery Co., Tacoma, Wash., has greatly reduced repair and replacement costs. Plywood is smooth, split-proof, splinter-free; nails can't work loose. Easily damaged merchandise gets maximum protection.

Plywood ducts exposed to corrosive chemical wastes at this cellophane plant have required no maintenance in over four years. Exhaust manifolds remove air laden with sulfuric acid mist, hydrogen sulfide, other chemicals and water vapor. Plywood used is high density type, which has a smooth, hard surface, requires no paint or other protection, and is virtually impervious to moisture and most acids and other chemicals.

FOR MORE INFORMATION about fir plywood—its uses, properties and advantages—write
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In Finance

No Rush By Individual Investors To Take FHA-Backed Mortgages

For the third time in three months, the Eisenhower Administration has moved to bolster the sagging housing market. The Federal Housing Administration announced it would for the first time make its insured mortgages available to individual investors, offering as a lure a yield of better than 5%. Previously, FHA lowered downpayment requirements for low-cost houses, and the Federal National Mortgage Assn. boosted the prices that it pays for mortgages.

Unlike the earlier moves, which had a direct impact on housing demand and on the flow of funds into residential construction, **FHA's latest gambit may not lead to any big increase in mortgage investment.** The mortgage market has been dominated by institutional investors—up to now the only ones eligible to buy FHA mortgages—and it's unlikely that individuals will rush in. For example, the First National City Bank, which operates 87 branches in New York City, reports that its real estate department had exactly one inquiry about the FHA offer in the first three days after it was made.

Behind the public's reluctance to invest in mortgages may be the substantial risk involved in such investments—even with the government's guarantee. For one thing, if a mortgage should go into default, the FHA normally pays it off not in cash but with a 20-year 4½% debenture. These bonds, when they trade, normally sell at substantial discounts. In addition, mortgage men say that FHA mortgages are notoriously hard to sell in small lots. This means that if an investor wanted his money quickly, he might have to take a big loss.

Great Northern and Northern Pacific Vote to Merge Four Rail Systems

Directors of the Great Northern and Northern Pacific railways voted this week to merge into what would be the nation's longest rail network. The new system, which would also include the Chicago, Burlington & Quincy and the Spokane, Portland & Seattle RR, would stretch 24,597 mi. from Chicago to Seattle and from Portland to Galveston. (Great Northern and Northern Pacific share a 97% ownership of Burlington and jointly own the Spokane line.) **It would be almost twice as long in trackage as the Atchison, Topeka & Santa Fe.**

Under terms of the agreement, stockholders of the Great Northern and Northern Pacific would receive one share of the new road for each share held. Great Northern stockholders also would receive ¼ share of 5½% non-voting preferred stock for each share held. Precise details haven't been made public on what Burlington's stockholders will get.

Besides forming the largest network, the new road would become the third largest railroad in gross oper-

ating revenues. Revenues last year of the four totaled \$735.7-million, topped only by the Pennsylvania RR and the New York Central.

Net income of the four roads last year totaled \$70.4-million, and analysts expect this to be topped once consolidation takes hold. A consultant's study showed that the new system could save about \$40-million annually, before taxes, by eliminating duplicate facilities.

The proposal should get necessary ICC approval without much trouble, in spite of the railway brotherhoods' announced intention of fighting the merger. Chief sticking point with the union is the concern of the Northern Pacific engineers that they would lose seniority in the combination.

SEC Approves Cities Service Plan To Sell Stock Interest in Arkfuel

The Securities & Exchange Commission has approved a plan that would give Arkansas Fuel Oil Corp. public stockholders \$41 in cash for each of their shares. Arkfuel's stock traded at \$39 this week.

Cities Service Co., Arkfuel's parent, agreed to such a plan last January (BW—Jan. 16 '60, p. 42), after two years of wrangling, in order to buy out minority stockholders. In 1957, SEC had ordered the oil company either to sell its 51.5% interest in Arkfuel or to buy out minority holders if it wanted to escape regulation as a public utility holding company. Cities Service responded with a \$25 per share offer, which was rejected.

Now that it has agreed to a \$41 bid, it will become exempt from the Holding Company Act and will be able to make acquisitions necessary to improve its crude oil position and expand its marketing territory.

CAB Sets Terms for Fiscal Divorce Of Pan Am and National Airlines

The Civil Aeronautics Board this week set the terms under which it wants Pan American World Airways and National Airlines to sever their financial ties. Its chief aim: **to keep Pan Am out of the domestic airline business.**

Under CAB's orders, Pan Am and National can within 60 days return the 400,000 shares acquired from each other, or file a joint plan to sell the shares. Pan Am's option to buy another 250,000 National shares is also cancelled. Both airlines said they would go along with the order, but declined to comment further.

Any divestiture-by-sale has these conditions: **The divestment must be completed in two years; neither airline can distribute its holdings of the other to its own shareholders; no single buyer can purchase more than 10,000 shares.**

CAB ordered the divestiture because it felt the share exchange passed control of National to Pan Am. The CAB said it had denied Pan Am domestic routes four times in the past 10 years, and that approval of Pan Am's stock interest in National would be tantamount to granting Pan Am a domestic route.

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Report to business from B.F. Goodrich



IF YOU BUILD HOMES OR PRODUCTS FOR THEM

B.F. Goodrich has a foot in y

MAYBE YOU'VE SEEN a thousand homes being built—or maybe just watched your own—but we'll bet you've never seen anything quite like this house. There really are too many things going on at once!

We created this picture to show you how B.F. Goodrich helps build better homes. For each of the products shown assists contractors in building houses a little faster, better, and at lower cost.

For example, these storm doors are made of BFG rigid vinyl—they'll never warp, never need painting. When it comes to painting—even the siding is different. It's aluminum, coated with enamel based on BFG vinyl. The manufacturer warrants the finish against blistering, cracking or crazing for ten years.

Even the pipe that brings gas to this house is different. Extruded from BFG vinyl, it will never corrode. Years from now it will provide just as efficient delivery of gas as right after installation.

These are just a few of the ways that B.F. Goodrich helps improve existing products or develop new ones. For more examples see the list at the right.

B.F. Goodrich serves business in many other fields, too—from agriculture to aviation, from mining to missiles—with raw materials and ideas on how to use them... with finished products that cut costs and solve tough problems. If you'd like more information on these products—or how BFG can help you with your problems—write President's Office, *The B.F. Goodrich Company, Akron 18, O.*



PRODUCTS IN THIS PICTURE MADE WITH VINYL MATERIALS FROM BFG

n your door

ON THE WALL, richly textured BFG vinyl stays new-looking, good-looking for years. Goes on like wallpaper. Won't scuff or stain, wipes clean with soap and water. Stands plenty of wear and tear, eliminates need of frequent painting.



VINYL FLOOR TILE THAT GLOWS IN THE DARK adds safety plus beauty to the home. New "After-Glow" phosphorescent tile, developed by B.F. Goodrich, continues to glow when the lights are out, illuminates dark stairways, halls, other danger spots.

1 & 2. FLOOR TILE and **GARDEN HOSE** by The B.F. Goodrich Company; **3. STORM DOORS AND WINDOWS** by Falako Corp., Akron, Ohio and Bayvo Products Co., West Collingswood Hts., N. J.; **4. JALOUSIE WINDOW FRAMES** by Woodlin Metal Products Company, Texarkana, Texas; **5. GAS PIPE** by Kraloy Plastic Pipe Company, Inc., Santa Ana, Calif.; **6. ALUMINUM SIDING**, coated with enamel based on BFG vinyl, by Hastings Aluminum Products, Inc., Hastings, Mich.; **7. WIRING** insulated with BFG vinyl by Anaconda Wire & Cable Company, New York; **8. ELECTROSTRIP** by Bulldog Electric, Detroit, Mich.; **9. SCREENCLOTH** of vinyl-coated Fiberglas by Owens-Corning Fiberglas Corporation, Toledo, Ohio; **10. AWNINGS** made by NAVACO, INC., Dallas, Texas; **11. TARPULIN**, vinyl-coated, by Weblon, Inc., New York.

Other BFG products shown are: **12. CELLULAR RUBBER** insulation; **13. TIRES** on truck and wheelbarrow; and **14. FOOTWEAR**, to keep workers' feet safe, warm, dry.





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Post Office Gives Big Order to Willys For Compact Jeep Delivery Trucks

Mailmen on many routes soon will pick up and deliver in specially designed Jeep trucks. The Post Office Dept. has contracted with Willys Motors, Inc., to build 3,120 mail vehicles at a cost of more than \$6-million.

It is the biggest non-military order for Jeeps that Willys has ever received.

Powered by Willys' standard 4-cylinder F-head engine, the new truck has an automatic transmission and two-wheel drive. The steering wheel is on the right side so that the driver can reach curb mailboxes.

Its wheelbase is only 80 in. long (over-all length: 133 in.)—considerably shorter than the compact cars—for easy parking and maneuvering in traffic. The van-type body has 110 cu. ft. of cargo space.

Front-end construction permits the driver to see the ground 36 in. in front of the bumper, a safety feature not found in any other delivery vehicle, says Willys.

Deliveries are slated to begin this November. While this first batch is designed particularly to meet Post Office requirements, Willys plans to introduce a commercial version early next year. W. P. Moss, vice-president in charge of sales, feels there will be a definite market for this compact truck, which features handling ease and low maintenance and operating costs.

...

Newest Computer Introduced by IBM Offers Speed and Convertibility

International Business Machines Corp. has just announced the birth of a precocious brother to its 7070 computer. The new machine, the 7074, is said to handle business data at least twice as fast and scientific data up to 20 times as fast as the 7070.

The only differences between the machines are in a

couple of modular boxes. The 7074 has a new central processing unit with faster switching speed and a different core storage control that reduces memory access time.

In fact, by doing a little minor surgery, IBM engineers can quickly change a 7070 into a 7074. That means, says IBM, that customers who do not have enough work to keep a 7074 busy can rent or purchase the less expensive 7070. If their needs increase, the users of a 7070 can get a lot more processing speed without too much additional expense by turning it into a 7074. Furthermore, they wouldn't have to reprogram their files to feed the new machine.

This may begin a trend, says IBM, to build families of data processors that can be converted into one another by changing a few building blocks. To date, computer owners have been able to step up capacity somewhat by adding more input-output devices or replacing the memory unit with a bigger one.

But this is the first time IBM has offered them modular attachments that actually upgrade the logical circuitry itself.

A typical 7074 installation will sell for \$1,284,350, lease for \$29,300 a month. This compares to \$1,077,400 and \$24,000 for a 7070. The 7070-7074 conversion costs only the difference in purchase or rental prices.

...

Remington Arms Uses Polyethylene For New Line of Shotgun Shells

Remington Arms Co.'s Peters Cartridge Div. has added a new line of shotgun shells with bodies made of high-density linear polyethylene.

The new shells are much tougher, stand up better in rough weather than conventional ones, says Remington. They won't swell in rain or snow, nor will their ballistic characteristics alter in extremes of heat and cold.

There were some earlier attempts by U.S. manufacturers to produce plastic shells, but they never came off because the material wasn't strong enough. (There are some made in Europe, however.) Remington claims it was able to develop a commercially feasible shell because its manufacturing process strengthens the polyethylene four or five times.

At present, Remington is selling the new shell only in 12-gauge long-range loads as a premium-priced addition to its standard line (they cost 50¢ a box more). But the company thinks polyethylene may eventually replace paper in all shotgun shells.

...

Compact Trailer Opens Up Like a Fan

A new mobile shelter, called the Accordion, is transported as a compact, 200-cu. ft. trailer but, at the camping site, opens up like a fan into 700 cu. ft. of wedge-shaped compartments. It can sleep six people. Structural components of aluminum support its plastic skin.

The Accordion was designed by Henry Glass for Aluminum Co. of America's program to generate new uses for aluminum. The company is demonstrating a prototype, but plans for production and marketing are still uncertain.

Mixing Ice Cream by Push Button

It's a long way from that old hand-churned ice cream that grandma used to make to the flashy, fruity confection you get today. The difference, though, isn't so much in basic ingredients, as in how they're mixed. What grandma once whipped up with a hand-churn and measuring cup now takes a computer.

In Boston last week, H. P. Hood & Sons, Inc., one of the country's leading ice cream makers, unveiled the ice cream industry's first automated batching process (pictures) for blending raw ingredients into a finished mix. Taking their cue from an IBM punch card, electronic controls throw open the valves in pipes connecting raw ingredient storage tanks with blending tanks, portion out the ingredients, then close the valves.

The amount of each ingredient used is all decided by a special, single-purpose analog computer designed for the

job by Brown Instruments Div. of Minneapolis-Honeywell Regulator Co.

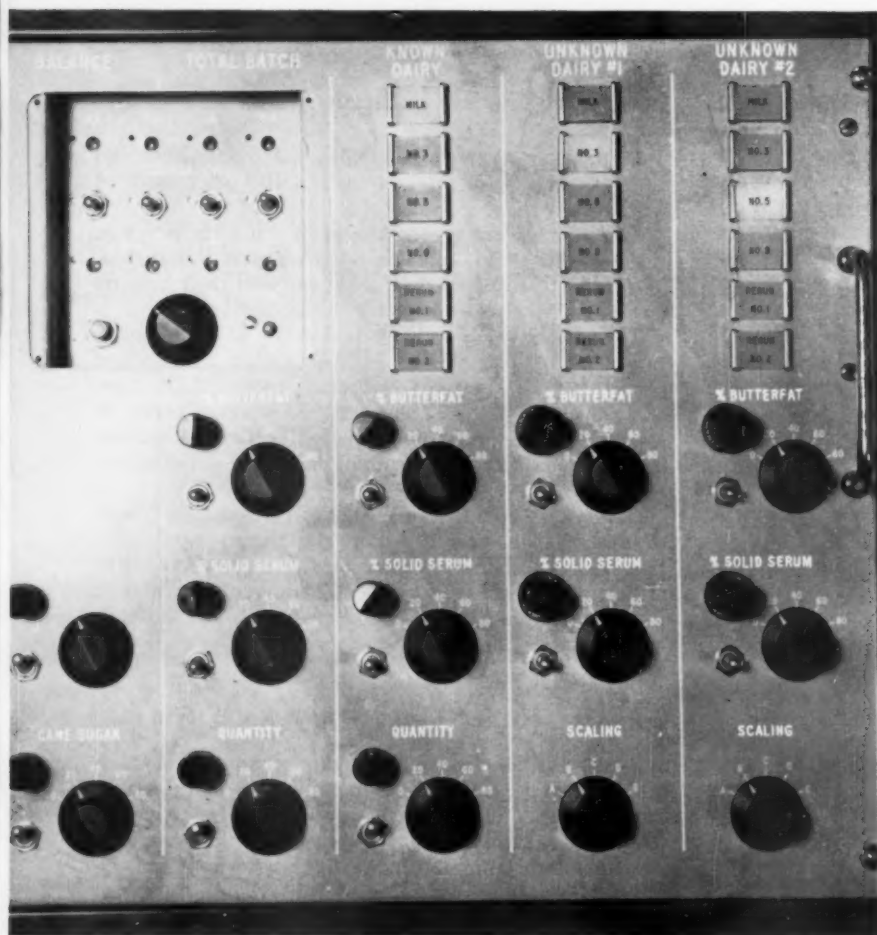
• **Computer's Job**—Actually, the computer doesn't have any really tricky equations to solve. It's just given six or seven basic ingredients and instructed through dials and push buttons to figure out what quantities of those ingredients are needed to produce a certain amount of ice cream of a given grade. A recipe man with high school algebra can do it, but it takes him 20 to 25 minutes to run through each one. The computer can whisk it out 20,000 times faster. Besides the obvious advantage in speed and quality control, the computer's precision eliminates any need for costly "safety" margins in the mix to be sure butterfat content is high enough.

It's this butterfat content, along with the solid serum or non-fat content, that determines the grade of the dairy products that go into ice cream. These

dairy ingredients include whole milk, skimmed milk, cream, and ice cream powder. Two or three of these are mixed with four other non-dairy ingredients—corn sugar, cane sugar, water, and flavor—to make the mix or batch.

The problem in recipe-making is that butterfat and solid serum content of dairy products fluctuates day-to-day. It all depends on the cows. So, to keep track of these fidgety grade levels, chemists must make daily lab analyses of the dairy ingredients they have on hand so the computer can be told exactly what grade of ingredients it's working with.

Results of these daily analyses, along with the ice cream orders from Hood's order department, go into the plant's control room. There the computer operator twirls the dials and pushes the buttons that tell the computer the size of the batch—how much finished ice cream he wants—which dairy products



COMPUTER PANEL has dials and knobs (left) for setting amounts of ingredients that go into ice cream. Operator pushes button on far right to start flow into mixer.



IBM punch card (left) figures out formula for desired grade and amount of ice cream.



FINISHED batch flows through mechanized packaging line to refrigerated storage.

Tough Target



Fire globes of tough
Tenite Butyrate
plastic

cut replacement

costs for New York City

Here's a good example of how a switch to plastic can improve product performance.

In New York City, orange-colored light globes mounted on nearby poles are used to call attention to the location of fire alarm boxes. However, over the years, vandal breakage of the glass globes had become a growing problem. Four years ago, two of the boroughs found an answer—they switched to globes of Tenite Butyrate plastic. Since then, each broken globe has been replaced with one made of Butyrate. Result: the replacement rate has been cut by as much as 60%. And even this improvement will be bettered in another year when the whole system will have been converted to Butyrate globes.

As in so many other applications, Tenite Butyrate supplied a superior combination of the properties needed...high resistance to impact, weather durability, good moldability and excellent light transmission. Of importance, too, the Tenite Color Laboratory developed a color formulation that duplicated the orange hue of the original glass globes.

Perhaps your company has an outdoor material problem that could be solved by a switch to Tenite Butyrate.

Why not investigate this tough, durable plastic? For information, write EASTMAN CHEMICAL PRODUCTS, INC., subsidiary of Eastman Kodak Company, KINGSFORT, TENN.

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BUTYRATE
an Eastman plastic

Fire globes molded of Tenite Butyrate by A. L. Hyde Co., Grenloch, N. J., for The Welsbach Corporation, Philadelphia 2, Pa., which does street lighting maintenance for the City of New York. Commenting on the considerable reduction in replacements since switching to Butyrate, Welsbach's New York City manager says, "Butyrate's resistance to shock is so great that no replacement is necessary when the globes are pierced by BB shot or even small bullets. They resist damage from small stones, and even large rocks will only tear the Butyrate, leaving the globe in serviceable condition."

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... the same principles could be applied in the meat-packing, baking, grain, and dairy industries ...

(STORY on page 64)

go in, and their percentages of butter-fat and solid serum. Finally, he sets the quality level—essentially, the butter-fat content—that he wants to end up with.

The computer then comes up with the number of pounds of cane sugar to go in the mix, the number of pounds of corn sugar, the amount of this or that dairy ingredient, and so on. This all comes out on a digitally coded punch card that's handy for Hood's automated accounting and production control.

If the operator specifies two dairy ingredients on a recipe, and their butter-fat and solid serum content that day are too low to produce the high content ordered for the finished mix, then the computer will just tell him it can't be done.

• **Cutting Corners**—The computer won't necessarily produce a recipe with a maximum number of low-cost ingredients and a minimum number of high-cost ingredients. But the operator can specify a certain quantity of a single, low-cost dairy product he may have on hand, and leave it up to the computer to figure out how much of the other ingredients it will take to bring the grade of the ice cream up to the level specified on the order.

Say a recipe normally requires 1,000 lb. of milk. If there are 1,100 lb. in the storage tank, it wouldn't be economical, because of the rehandling expense, to leave the extra 100 lb. in the tank. So the operator would give the computer 1,100 lb. of milk as a starting point, and the computer would juggle the other ingredients around until it balanced things out.

Along this line, M-H is working on a more sophisticated system that would automatically figure out the most economical combination of dairy products for a given grade of mix. "All it should take is another row of dials under the dairy products so we can just indicate the costs of the ingredients," says Bjorn Dahlin, group leader in M-H's dynamic analysis group and the engineer who designed the Hood computer.

• **Mixing the Batch**—Once the computer has decided what to do with all these ingredients, the output card that emerges—one to a recipe—is put into a card reader that converts the punched holes into electrical impulses that operate the batching equipment.

From the blender or mixer, the finished batch flows to the freezer, through Hood's mechanized packaging line; then to a quick-hardening tunnel for preventing crystallization during storage,

and finally to refrigerated storage until it's shipped out.

• **Gains**—Hood expects big savings to result from the computer-regulated ice cream-making process—and these will help it skim more of the cream off a \$2-billion-a-year market in the product. For Minneapolis-Honeywell, these same savings by Hood should help M-H drum up some single-purpose computer business in the ice cream and other food-processing industries.

"Single-purpose computers that do only one job have countless applications in the food industry, or any other industry where you're working with basic formulas and mixes that vary," says William Taylor, M-H's marketing manager for the food industry. "It's a small, comparatively inexpensive computer that small and medium-sized companies can afford."

Taylor says you can put together the same sort of recipes with the huskier business-machine type of computer used in data processing. However, these bigger cousins to the single-purpose computer cost too much to keep around a plant full-time. And as it is, the smaller computer is kept humming most of the day. A big machine might be idle half the time.

• **Costs**—The price tag for Hood on the M-H computer itself—not counting in the IBM card punch—was about \$20,000. With the card punch, blending equipment, and special clean-in-place hardware for scouring the pipes and tanks after each batch, the total cost to Hood hit between \$50,000 and \$80,000.

The expenditure is part of a giant \$350,000 expansion program at Hood that has increased its capacity 70% in the last year. Where Hood before was turning out 1,500 gallons of ice cream each hour, it's now mixing 2,500.

• **Other Computer Markets**—Minneapolis-Honeywell's Taylor feels the same computer principles could be applied right off in the meat-packing, baking, grain, and dairy industries—to name just a few.

Sausage making, he points out, uses five or so types of meat, varying in cost, lean and fat content, and so on, out of 30 available; a single-purpose computer, he insists, could pick the five most economical for the grade or mix of sausage wanted. Taylor estimates a major meat processor could save perhaps \$5,000 to \$7,000 a day with a single-purpose computer in one of its plants.

The chemical processing and oil industries, Taylor notes, have similar computer needs. **END**

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Double-Duty Offshore Oil Rig Spares Heavy Equipment From Light Jobs

In offshore oil drilling, where equipment costs run about as high as the wells run deep, a money-saver has been developed by the California Co. and Loffland Bros. Co., drilling contractor. It's a double-duty rig that can drill one well at the same time that it does the workover, or adjustments, on one that has already been drilled.

The specially equipped single platform and derrick uses two rigs—one heavy-duty job that drills the wells, and a smaller one for putting the finishing touches on new wells or adjusting completed ones. The conventional offshore platform uses the same rig for both jobs, which means that on the workover chores a heavyweight rig is tied up on a lightweight job.

Loffland crews are using the double rig for 18 directional wells 30 miles south of Leeville, La., in the Bay Marchand field.

• • •

GE Presses Automation of Plant Making Equipment for Atomic Industry

Suppliers of components for the nuclear industry have gone in for automation for some time, but General Electric is now pioneering its use in turning out the major finished items themselves for the nuclear business.

Last week GE's Atomic Power Equipment Dept. was busy installing the second tape-controlled machine tool at its San Jose (Calif.) plant. Six more of the tools will be installed in the next year or so.

At San Jose, GE is also speeding up the automation of inventory control, parts listing, and the ordering of frequently used parts.

• • •

Linde Develops Process for Converting Metals, Alloys Into Spherical Powders

Linde Co., a division of Union Carbide Corp., has developed a process for converting metals and metal alloys into spherical powders whose particles range in size from 20 to 150 microns. The particles are said to be free of such imperfections as cavities, voids, and voids filled with impurities. Only 2% of the particles are non-spherical, giving them a uniformity rate of 98%.

The addition of the new powders to sintered powders (which are variously shaped) should result in tighter control of porosity when the mix is pressed into molds and fired under heat. Linde also expects that the intermix of powders will improve their flow into the mold, assuring better production rates.

The new powders also offer a safety bonus. Highly reactive powders are less hazardous to handle when they

are spherical. That's because their tighter surfaces reduce the chance of contamination which can lead to explosion.

Another possible use for the new spherical powders might be as an ingredient of rocket propellants. It already has been established that angular aluminum powders added to solid fuel rocket propellants increase thrust significantly. Linde feels the use of its uniformly spherical particles might shove the thrust even higher. For the missile and rocket market, Linde also is working on spherical powders with a particle size under 20 microns.

The Linde particles are produced in a totally inert atmosphere to hold onto the high purity of the original metal used. Linde starts with wire $\frac{1}{16}$ in. in diameter that is free of any surface defects.

Right now, Linde's Crystal Products Dept. has six different powders available in limited quantities: copper, Nichrome, aluminum, tungsten, stainless steel, and nickel. Other spherical powders will be developed as markets open up.

• • •

Production Briefs

Tennessee Valley Authority has awarded Westinghouse a \$265,000 contract for two flash evaporators—normally used to convert sea water into drinking water—to distill and purify the water for its new steam plant in Paradise, Ky. By substituting flash evaporators for the conventional submerged, tube-type evaporators, TVA expects to increase kilowatt output, reduce amount of coal burned, at a saving of \$1-million.

Western Union's new transcontinental microwave beam system for transmitting all known methods of communication will extend beyond the Los Angeles-San Francisco-Boston route originally planned. The network will be extended from Boston to New York City, Albany, Syracuse, Buffalo, Cleveland, Toledo, Detroit, and Chicago. From Kansas City, another extension will go into Dallas. The expanded \$41-million project will multiply WU's existing circuit network, more than 10 times.

Pacific Gas & Electric Co. has a green light from the Atomic Energy Commission for a pressure-suppression system for the company's Humboldt Bay nuclear boiling water reactor. The system curbs abnormal pressure build-up by piping steam from the inner core of the reactor into outer pools of cooling water. AEC's approval came after seven weeks of tests with a scale model.

Ozalid Div. of General Aniline & Film Corp., a long-time specialist in dry-developing materials and machines, is introducing a full line of semi-dry sensitized papers. Ozalid claims the moist-developing process eliminates the ammonia odor problem.

Double-decker loading is shaping up as the next step in the shipping of prepackaged freight (BW-May14'60, p114). Van-Pak, Inc., has just put into operation an 80-ft. freight car that carries two tiers of Van-Pak containers. More cars are expected. The containers are used for shipping household goods; each is about 8 ft. square and holds about 2,000 lb.



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LABOR

Waiting for Proof on Johnson

● AFL-CIO sidetracks endorsement of the Kennedy-Johnson ticket until the Texan has proved himself in the late summer session of Congress.

● His nomination for Vice-President startled labor leaders at Los Angeles, even angered George Meany.

● There's no chance that labor will endorse the GOP ticket, but they might refrain from endorsing the Democratic slate despite their enthusiasm for the platform.

AFL-CIO endorsement of the Democratic national ticket is no certainty now. There is a growing disposition in union ranks to revert to a traditional labor position of no endorsement at all in Presidential politics.

The federation last weekend took a tentative first step away from an expected endorsement. Before leaving Los Angeles, AFL-CIO leaders announced that a general board meeting in Chicago Aug. 17 summoned to make political decisions was off, at least until early September.

• **Backing Planned**—The general board meeting, to be attended by international union presidents and AFL-CIO officers and the executive council, was scheduled to "determine labor's position in the Presidential election." It was frankly admitted to be a meeting for a Presidential endorsement—with the odds overwhelmingly for the Democrats.

The Aug. 17 date—after both party conventions—had been set officially to give labor time to consider and weigh "voting records of the Democratic and Republican parties, their platform commitments, and the individual records of [their] candidates for President and Vice-President."

At Los Angeles, sentiment for endorsing the Democratic slate on Aug. 17 had risen as the Democrats:

• Adopted a platform that AFL-CIO Pres. George Meany described jubilantly as "a sound, liberal platform—the most constructive and progressive in my memory."

• Chose Sen. John F. Kennedy as their Presidential candidate on the first ballot (BW—Jul.16'60,p25). Few in labor have any strong reservations about the nomination of Kennedy; unionists on the convention floor and working backstage were almost solidly for him from the start.

Disillusionment set in when Sen. Kennedy invited Sen. Lyndon B. Johnson to run with him for the Vice-

Presidency, and the Texan accepted the invitation (page 32). Labor was jolted when it learned that a candidate it considers a conservative would be the Democrats' second man.

• **Meeting Off**—Shortly afterward, Meany conferred in Los Angeles with several members of the AFL-CIO executive council. An aide said the Aug. 17 meeting was reconsidered.

When that date was chosen, Congress had not yet decided to return to work after the party conventions. Its heavy load of unfinished business includes minimum wage and other legislation important to labor. Under the circumstances, an announcement said, the federation's executive council decided to postpone the Chicago session and action on an endorsement until after Congress adjourns, about Labor Day. A union spokesman said that such a postponement shouldn't surprise anybody.

Perhaps it shouldn't, but one can't ignore the fact that the announcement was not made until after the Democrats had nominated Sen. Johnson. It is almost certain that if the Vice-Presidential nomination had gone to Sen. Stuart Symington of Missouri or anyone else on labor's "liberal" list, the Aug. 17 conference would have been held as scheduled—Congress or no.

• **A Warning**—In effect, the cancellation is a warning and threat to the Democrats. The party is being told that it must now prove its liberalism—on Capitol Hill in August—or face the loss of a labor endorsement of its national ticket.

This isn't a threat to endorse or in any way shift support to the Republicans. That isn't in the cards. It is only a threat to refrain from any endorsement—as labor has before.

This would be a more important step than first appears: If there is no overriding AFL-CIO endorsement, federation affiliates and their officers will be

free to campaign more openly for Republican candidates if they choose.

The AFL-CIO decision—to endorse or not—will come after the forthcoming "test of the new Democratic party leadership" on Capitol Hill in the recess session of Congress—its success in pressing the adoption of "major policy bills that have been blocked by the conservative coalition" of southern Democrats and Republicans.

The union particularly will have eyes on Sen. Johnson, the Democratic majority leader.

• **One Setback**—Labor got nearly everything it wanted at the Democratic convention. Its leaders and the 260 delegates from unions (most with half-votes) were heartened by the degree of acceptance of their 36 platform proposals. The unions' one setback—Johnson's nomination—was perhaps by default.

Labor's officials working behind the convention scene were confident that Kennedy would recommend a Vice-Presidential nominee from the "liberal" list, acceptable to the unions. They even sent word to him that they had no suggestions for second place.

Word that Kennedy had chosen Johnson came as a shock. "You're kidding—I hope?" said one union leader. Another conceded that the Kennedy-Johnson ticket would be a strong one, could be a winning one, but added ruefully that it isn't a liberal ticket and certainly isn't a labor slate.

An AFL-CIO vice-president and close associate of George Meany described the federation president as "so roaring mad over Johnson . . . the words wouldn't come out of his mouth." So angry, indeed, that Meany snubbed Sen. Kennedy, the federation officer added.

• **Meany Reacts**—After Kennedy had agreed on Johnson, he sent a chauffeur and limousine to the Ambassador Hotel to bring Meany back to the Kennedy suite in the Biltmore. The Presidential nominee wanted to tell Meany of the plan to nominate Johnson, to get his approval if possible.

Meany already had heard about the Vice-Presidential choice.irate, he refused to budge from his hotel. The chauffeur waited an hour and a half, then returned to the Kennedy headquarters without Meany.

Other AFL-CIO leaders were angry, too, but more cautiously so. At Meany's call, they gathered to cancel the Aug. 17 general board meeting. One said they felt a postponement would give labor a better chance to "look into reasons for the selection of Johnson," as well as a chance to test his liberalism

in Congress during the recess session.

• **Chill to Disappear?**—The chill over Sen. Johnson's nomination may disappear as the campaign gets under way.

As a matter of fact, the unions began closing ranks perceptibly behind the Texan early this week—even though officially there continued to be a reserve about his candidacy.

Unions are beginning to create a new image of Sen. Johnson as an early supporter of Pres. Roosevelt and the New Deal—magic names in labor—and as a senator who has tended to be increasingly liberal on key issues. Since 1956, Sen. Johnson has cast very few “wrong” votes, a political strategist for labor commented—in marked contrast to the way the same spokesman talked when the Texan was in the running for the Presidential nomination.

• **Influence Feared**—The laborites are concerned about Johnson's possible influence in moderating what the unions consider an exceptionally good party platform—the best ever.

In the past, perhaps, this worry would not have been very important; the Vice-President was hardly influential enough to cause anyone real concern. Some in labor still feel that it might be a good thing to have Johnson in the Vice-Presidency instead of as majority leader in the Senate.

Edward J. Leonard, president of the Plasterers & Cement Masons (AFL-

CIO), is among them. “If elected Vice-President,” Leonard said in Los Angeles, “he’ll be out of the Senate, where he’s been bottling up labor legislation as majority leader, and watering down what is good for us.”

Others in key union spots say that may be wishful thinking. However, there is a firming belief that Johnson will live up to his pledged support for civil rights and labor planks of the new platform. One of labor's shrewdest politicians, Arthur J. Goldberg, counsel for AFL-CIO and the United Steelworkers, is working hard to overcome labor's reservations on Johnson. He is picturing the Texan to unions as “a man of his word.”

• **The Platform**—AFL-CIO asked the Democratic platform committee two weeks ago for a broad, very liberal program—to include a 35-hour work week, major revisions in a tax structure whose burden, labor said, “falls most heavily on low- and moderate-income families,” and a 5% growth rate for the economy.

The Democratic platform goes a long way toward what labor urged, although it does not call for a legislated reduction in the present 40-hour week or for the higher personal tax exemptions long sought by unions.

The platform supports labor's demands for labor law revisions to repeal “excesses” that unions say are in the

Taft-Hartley Act and the amending Landrum-Griffin Act. It is significant that AFL-CIO now supports a plank that does not call for outright repeal of the Taft-Hartley Act—an objective in other Presidential campaigns since 1947.

• **Labor and the GOP**—Labor's contingent of 260 delegates at the Democratic convention was the largest ever (BW-Jul.2'60,p80). The unions will have no more than 10 delegates at the Republican convention in Chicago next week—and very few staff people will be on hand.

Lee W. Minton, president of the Glass Bottle Blowers, an ardent Republican in other campaigns, is among labor's leaders who say their votes may shift to the Democrats this year. Vice-Pres. Richard Nixon, the almost certain GOP nominee, has been working quietly to recruit friends in the labor movement. Hardly any are out in the open.

Minton said recently that he “cannot support Nixon for the Presidency.” Another GOP-minded laborite in the Midwest commented that “between Nixon and Kennedy, the decision has to be Kennedy.”

New York Gov. Nelson A. Rockefeller, on the other hand, has many friends in the unions—including those that are now considered safe for the Democrats.

War Chest for Long Strikes

AFL-CIO's Industrial Union Dept. urges its affiliates to create a joint fund or take out insurance in a period when management resists long and bitterly.

Strikes today are likely to run longer and to be more bitterly fought by employers than at any time in the last quarter century; labor should be ready with “big strike funds or some form of strike insurance.” That's the advice of AFL-CIO's Industrial Union Dept. to its affiliates.

IUD has—on paper—a central strike fund covering its 69 unions with more than 6-million members. Started with \$1-million contributed last year to the United Steelworkers and returned untapped after the strike, it will be bolstered, according to plans, by:

• Other pledged contributions, for the most part money returned by the Steelworkers to the United Auto Workers, International Union of Electrical Workers, and other unions.

• A levy of \$1 a member on participating unions, to produce a possible \$6-million a year.

So far, the fund is inoperative. Pledges haven't been called in. The

levy—to be on a voluntary basis—hasn't been started. Only the original \$1-million is in the bank. Nevertheless, the probable future importance of the fund must be recognized.

• **How to Do It**—IUD policymakers generally agree that there is an important need for a source for ready money—and lots of it—to back up any union engaged in a prolonged battle with management. What appears to be holding up the plan is an undecided question of the way contributed funds should be used. Particularly, there is uncertainty about whether funds should be accumulated in a war chest—and allocated from it to striking unions—or used to buy strike insurance.

Either way, IUD's Director Nicholas A. Zonarich expects the fund to be a potent factor in long strikes. In a recent recommendation that all IUD affiliates give wholehearted support to the mutual strike fund, Zonarich warned:

“With improved facilities for production and automation, employers are now in the position to withstand long shutdowns. Some of them try to break a strike by continuing to operate, using supervisors and nonunion people, whoever they can pick up. The only answer is to have big strike funds or insurance to help strikers hold out.”

• **Endurance Tests**—Zonarich warned that although collective bargaining is “very much alive and kicking” today, in too many instances negotiations are “becoming a contest of strength and time, with the winner the one who can hold out the longest.”

Many employers are aware of this, he said, and build up inventories or earmark funds for a long showdown. Some have insurance against strikes; others have or are setting up employer mutual-aid plans.

“It's essential that labor get started with its own preparations for any crisis that might come up,” Zonarich said.

He suggested that funds should be on hand to pay weekly benefits to strikers for as long as six months.

The concern now being shown within labor over the costs of long strikes is largely a result of the 116-day strike

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by half a million steelworkers in 1959.

- **Steel Strike**—Arthur J. Goldberg, general counsel for the United Steelworkers and one of its contract negotiators, revealed that the union's long walkout cost the international and its striking locals \$25-million. The parent union's share of strike benefits was \$6,333,342, USW reported to the government (BW—Jun. 4 '60, p.82).

The United Steelworkers does not have a system of strike benefits—weekly payments to strikers, paid automatically to all. Many unions do have. If the USW had been committed to weekly payments, its costs would have soared much higher.

Goldberg told other unions a few weeks ago that they shouldn't overlook one lesson of the 1959 steel strike: Labor should always be sure of sufficient financial reserves for a long walkout if workers leave jobs; any idea of a short, cheap strike is dangerous.

Although some unions are even richer than the Steelworkers and are able to pay for their own strike adventures, as USW did, most are much more vulnerable when strikes drag on. These are the unions that IUD is anx-

ious to back with a mutual strike fund.

- **Internationals**—The internationals are just as concerned over the mounting costs of strikes.

The Textile Workers Union of America recently voted to create its first "defense fund," to raise up to \$1-million a year to "protect and preserve textile unionism." The money is to come from a \$1-a-month increase in dues, divided equally between the international and its locals.

The Textile Workers felt in the past that striking locals and their members ought to bear the costs of walkouts that benefit them, with only limited help from the international.

The United Packinghouse Workers has had a strike fund for years but found it inadequate in a 52-day strike against Swift & Co. and a 109-day walkout against Wilson & Co. in the fall and winter of 1959-60.

Looking ahead to further hard bargaining next year, the UPW voted recently to assess members \$1 a month to bring its strike fund back to a \$2-million level and to call on them for "emergency dues" of \$5 a month to be paid by all who work during strikes.

Hoffa Arch Foe Quits as Monitor

O'Donoghue's resignation as chairman of Teamsters board of monitors leaves issue of union reforms in doubt.

The campaign to unseat Teamsters Pres. James Riddle Hoffa almost came to a halt this week with the resignation of Martin F. O'Donoghue as chairman of the court-appointed Teamsters board of monitors.

The campaign against Hoffa is still moving, but only barely so, with Hoffa facing possible trial in October on charges of misuse of funds of the International Brotherhood of Teamsters. O'Donoghue won't be there—as a monitor—if the trial does come off.

- **No Headway**—O'Donoghue, a labor attorney, last weekend resigned the post he held almost two years. He did so primarily, he said, because his monitor board was not making headway in its efforts to remove Hoffa as provisional head of the truck union. The long-expected resignation jolted anti-Hoffa forces. They had counted on O'Donoghue as the big remaining roadblock in the way of Hoffa's becoming Teamsters president—free of the monitors and the court.

For the past year, O'Donoghue almost single-handedly has held out against Hoffa. At one time, the Teamsters official had the McClellan racket investigating committee, the Eisenhower Administration, and the AFL-CIO as outspoken enemies. Their opposition faded when they failed to make

corruption charges against Hoffa stick. An anti-Hoffa monitor wavered; only O'Donoghue stood fast.

- **Trial Uncertain**—As monitor chief, O'Donoghue laid out a series of charges against Hoffa that would be the substance of the October trial. The issue now is whether there will be a trial at all. This decision is now in the hands of the Court of Appeals.

With O'Donoghue's departure, the monitor board loses not only its chairman but also the only member who still seeks Hoffa's ouster as Teamsters president. The other two members, unionist William E. Buffalino and attorney Lawrence Smith, have sought to sidetrack moves against Hoffa to concentrate on other "housecleaning" moves.

The monitors originally were appointed by Federal Judge F. Dickinson Letts to clean up the truckers' union while the courts retained control of the Teamsters leadership. The Teamsters consented to this arrangement at the time Hoffa became provisional president—but the union has fought hard since then to shake off the monitors.

In resigning, O'Donoghue cited the union's "unrestrained legal attack" against his efforts. When he accepted the resignation this week, Judge Letts announced that he would appoint a successor later. **END**

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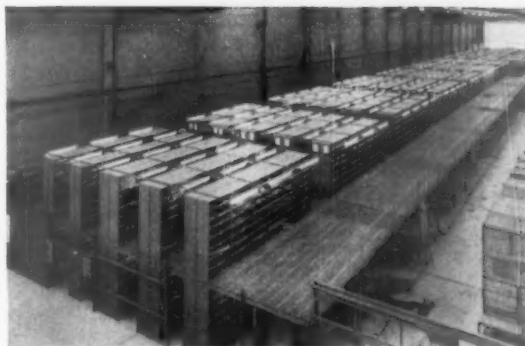


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In Labor

. . .

"Permanent" Nonunion Strike Replacement Loses Suit Over Firing by Wilson & Co.

A "permanent" nonunion replacement employee, hired during the Wilson & Co. strike and discharged after the walkout ended, failed last week in a federal court suit asking damages. The court ruled that a worker who takes a job during a walkout is not entitled to special consideration for permanent employment.

Walter Albers, of Kiester, Minn., was one of 950 nonunion workers hired by Wilson & Co. to keep operations near normal after the United Packinghouse Workers struck last December. The company offered them permanent employment. As the walkout dragged on, the key issue became one of job rights—the opposed claims of strikers and replacements.

In the end, the parties agreed to let arbitrators decide who would get the jobs. The decision was to assign work by seniority. The replacements, at the bottom of the list, were laid off but given a prior claim on whatever jobs open up.

Albers, active at one time in an attempt to organize for a UPW rival in the Wilson plant, contended this was not "permanent employment" in the sense of the company's offer of work to replacements. He sued for \$33,000 damages, alleging that those employed during the strike took jobs—knowing they would be subjected to "violence of one sort or another"—only because the company promised permanent employment. The court rejected this argument.

The decision is important. If Albers had won, Wilson would have faced similar suits by others among the 950 replacements. More far-reaching, the decision against the legal rights of strike-hired workers places the promises of "permanent" employment in a new perspective for other companies and industries.

. . .

NLRB Rules for Burt Mfg. of Akron In Long Fight With Craft Union

The Burt Mfg. Co. in Akron is confident that a long-awaited National Labor Relations Board order against the Sheet Metal Workers will bring the union's economic war against Burt to a quick end. But Burt has had hopes dashed before. It is taking nothing for granted now.

The United Steelworkers has bargained for Burt employees since World War II. The SMW represented them before and contends they still should be in its craft ranks. For years, as a result of this dispute, SMW craftsmen have refused to handle Burt-made products. This has cost Burt millions of dollars in lost business.

AFL-CIO tried for five years to break the boycott, which soon became a part of the federation craft-vs.-industrial union conflict. AFL-CIO pleas and then orders failed to sway the SMW—or, the latter explained, craftsmen "acting on their own in this matter."

The case went to NLRB on boycott charges. A trial examiner heard testimony that filled 2,500 pages over a two-year period. Two weeks ago, the board ruled for Burt against the Sheet Metal Workers—ordering the union to end its boycott.

NLRB rulings are final unless they are reversed by a federal court. Violators can be cited for contempt.

. . .

Milwaukee Survey Shows Fringe Costs Averaging 21.2% of Gross Payroll

There is little news today in the high cost of fringe benefits; everybody recognizes that they are a substantial—though sometimes hidden—part of labor costs. However, periodic surveys of fringe costs serve a useful purpose in emphasizing the need for bargaining on a broader base than wages alone.

A survey just published by the Milwaukee Assn. of Commerce shows that 43 manufacturing and nonmanufacturing companies, employing 50,000, had fringe costs in 1959 averaging 58¢ an hour, or 21.2% of their average gross payroll.

The fringes surveyed included the employer's share of legally required payments—such as social security, unemployment compensation, and workmen's compensation—ranging from about 5¢ an hour to more than 13¢, or from 2% to 5.9% of gross payroll. Voluntary or agreed-upon fringes—pension plans, insurance, vacation and holiday pay, and the like—cost from 5¢ an hour to 34.9¢, with the big concentration in the upper range.

. . .

Labor Briefs

The United Electrical Workers this week urged all labor to adopt a 35-hour work week at 40-hour pay as a serious bargaining demand. UE contends that industry and government haven't offered any alternative solution to problems of rising unemployment "caused by expanded production with fewer workers." Actually, UE is seeking backing for its demand in General Electric bargaining for a 35-hour week.

The Moulders & Foundry Workers this week "unconditionally" called off a strike against Special Products Co. in Chattanooga. It said the company "filled the shop with new employees—there's not much we can do except sit down and watch it." The strike began 6½ months ago, when 118 workers walked out in a contract dispute. Some returned later.

Some service has been restored by Southern Airways, Inc., whose pilots struck June 5 in a dispute over pay for nonflight time under some circumstances. The Atlanta-based airline has hired "a number of qualified nonunion pilots" to make possible a partial resumption of flights but faces threats of tighter picketing by the Air Line Pilots Assn.

The National Labor Relations Board handled a record number of cases last year—21,633 or 29% more than the previous high in 1958. The big reason: a "spectacular" increase in the number of unfair labor practice charges.

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THE ONE TO WATCH FOR NEW DEVELOPMENTS

INTERNATIONAL OUTLOOK

BUSINESS WEEK

JULY 23, 1960



Although the focus of the Cuban crisis has shifted to the United Nations and the Organization of American States (page 28), Cuba itself is still boiling.

Watch for an anti-American outburst on July 26. That's the anniversary of the beginning of Fidel Castro's revolution and his regime's "Fourth of July." Castro and his band are planning a huge rally in the Sierra Maestra mountains, from which they launched their drive to power.

Coinciding with the July 26 celebration will be the meeting of the First Congress of Latin American Youth, which is strongly backed by the Communist World Federation of Democratic Youth.

Note this: The U. S. Naval Base at Guantanamo Bay is situated at the edge of the Sierra Maestra. While the Castro government has made no overt mention of the base for a few days, a heated rally so close could produce a dangerous situation.

Opposition to Castro's ties to the International Communist movement is increasing, especially among Roman Catholics, who make up 90% of Cuba's population. This week, there were two anti-Communist demonstrations during Masses. Castro responded by coming out of secluded convalescence to denounce the Catholics and their priests.

Catholic laymen say they are organizing a passive resistance campaign. Some are urging Catholics to attend Mass on July 26 dressed in mourning garb. Others are asking people to stay inside to make it "a day of the dead." So far, church authorities have not joined the move publicly.

Castro's attacks on Catholics have left a bad taste in the mouths of other Latin Americans, the majority of whom are Catholics, at least nominally. In Mexico, a Catholic lay organization expressed public dismay and opposition to Castro's action.

Cuba has mystified U. S. bankers by permitting the transfer of \$1.1-million from the Cuban Electric Co.'s frozen funds to the Export-Import Bank. This is a two-weeks past-due payment of interest and amortization on a \$20-million loan to the American & Foreign Power Co. subsidiary.

With Cuban officials threatening to expropriate all U.S.-owned assets in Cuba without compensation, Ex-Im and AFP spokesmen say the payment comes "out of a clear sky." One possible reason for it: When Cuba expropriates the electric company, it wants its official company debts current for propaganda purposes.

Japan's new Prime Minister, Hayato Ikeda, is a staunch friend of the U.S. and the Western nations. The former trade and finance minister is known as a strong personality, often stubborn when confronted with opposition, and sometimes lacking political tact.

Ikeda believes in gradually freeing Japanese trade and capital flow, unlike many conservative politicians who pay only lip service to efforts to integrate Japan further with the industrialized nations of the West.

Japanese politics have polarized within the last few months. The Socialists have moved further to the left and, for the first time in the post-war period, there's a possibility of a regrouping of the extreme right based on the conservative countryside.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

JULY 23, 1960

It will take Ikeda's best efforts to steer a middle course and to rebuild the middle group that has dominated much of the postwar era. If he can hold out for the summer, late fall elections will probably return him and his conservative Liberal-Democratic party to power.

Ikeda cannot rely on the Japanese business community for much help. It stayed in the background all during the student riots last month. Its leaders seem complacent, figuring that Japan can rely on American protection. From every indication, it will offer little leadership in the work of setting Japanese politics back on an even keel.

In the wake of violent Communist-organized riots, Italy's feuding center parties have joined together to support a stronger Christian Democratic government probably headed by former Premier Fanfani. Backed by Democratic Socialists, Liberals, and Republicans, the new government will have a firm majority in the Italian Parliament. Also, it's likely to have Mario Scelba as Minister of the Interior. He's the one who used strong-arm methods against the Communists back in 1948.

Premier Tambroni resigned this week after holding office for less than four months. A member of the right-wing Christian Democrats, Tambroni had to rely on Fascist votes to survive parliamentary tests. Fanfani belongs to the left wing of the same faction-ridden party.

One threat inherent in the Congo situation (page 28) is a possible confidence crisis on the Brussels Bourse.

Receipts from the Congo have accounted for such a small part—about 1%—of Belgium's national income in recent years that the Belgian economy doesn't stand to suffer too much.

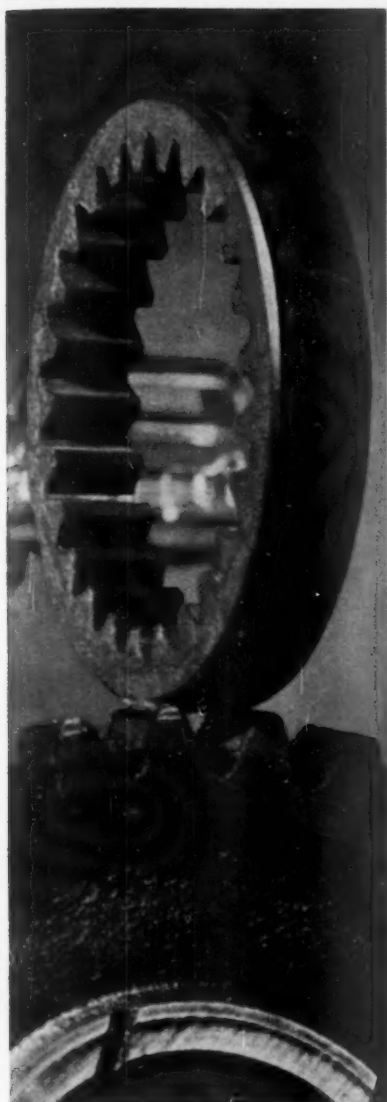
But if one or more big Belgian companies get into serious financial difficulties, a confidence crisis could easily develop in Brussels. If that happens, it could bring on the first test of the Common Market's arrangements for mutual support. West Germany and Holland probably would be ready to offer stand-by credits.

Detroit's compacts have touched off a minor price war among Britain's overstocked car dealers by winning sales in the U. S. that the British expected to make.

Something new in the British car market, price cutting started after General Motors' Vauxhall released dealers temporarily from price maintenance agreements. The GM subsidiary wants showrooms cleared of unsold export models. After that, prices will be restored.

The price war so far is limited to what the British call "medium" size cars—what we call compacts. It is aggravated by credit restrictions and the growing popularity of smaller autos in Britain. Apparently confident that the price war will be short-lived, British car makers say they are standing by their plans for expansion.

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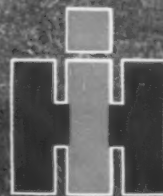
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**INTERNATIONAL
HARVESTER**

THE MARKETS

Metals Markets Run Into Turbulent Times

As United Nations diplomats moved quickly, if not consistently, to assure the independence of the new Congo Republic (page 29), U.S. copper companies and their customers this week nervously eyed the hectic events in the mineral-rich region.

American copper companies have had a nerve-racking year—and the unrest in the Congo is only one factor that concerns them. Over the past 12 months, copper prices (chart) have strangely risen despite the domestic slowdown in business. The rise is due largely to (1) a prolonged shutdown of mines last year and (2) some scare buying abroad, brought on by political unrest in the Congo—supplier of roughly one-third of Europe's copper needs.

Copper men say that if things should smooth out in the Congo, prices of copper and copper products might not be able to resist a downward drift. As one copper company official put it: "Stocks are too high, and business is too slow."

• **Soviet Price Role**—What's happening in copper is also being felt in other metal markets. Today, traders are plainly nervous not only because of the troubled Congo situation but also because the Soviet Union is involved. There's fear of Soviet intervention—direct or indirect—in the Congo, whose Katanga province is producing some 9% of the world's copper and a substantial amount of cobalt, uranium, zinc, germanium, radium, and industrial diamonds.

Military intervention, of course, carries with it much greater danger to world peace of mind than Soviet trading in copper or other metals. (The Soviets are net importers of copper.) But the Soviet Union once again has assumed the role of a price-maker—or price-breaker—in world commodities, and the threat of its trading in metals markets is keeping traders in a state of jitters.

• **Two Coups**—In the past week alone, Soviet Russia has pulled off two stunning blows:

• In the Far East, Western refiners were forced to cut the price of crude oil to the Indian government in order to meet Russian competition (page 96). Although Russian oil exports to the West don't amount to much, the Soviets have won some ground in Italy, Japan, and now Cuba.

• The Russians also announced

that they had agreed to purchase the 700,000 tons of Cuban sugar that the U.S. had lopped from the island's export quota. The Russians paid 3.25¢ a lb., some 0.35¢ a lb. above the prevailing price of world sugar two weeks ago. This price trend—plus the fear of a disruption in domestic supplies—already has U.S. refiners bidding up prices on sugar. The U.S. price for raw sugar this week reached 6.70¢ a lb., the highest price since 1951.

• **Metal Deals**—Soviet entry into the metals markets would not be entirely new, either. Late in 1957, Russian shipments of aluminum to Western markets picked up sharply; they were a minor factor in forcing a 2¢-a-lb. price cut in April, 1958. Russian tin shipments were stepped up, too, and strong efforts of the International Tin Council were needed to maintain a floor under tin prices. (Russian tin shipments stepped up this week, too, as the Soviets took advantage of a four-year high in tin.)

Also in 1957-58, the Russians came into the metals markets with extra-large amounts of platinum, with the result that platinum prices, already under pressure, took a sharp tumble.

I. Copper

The cross-currents at work in copper are reflected best in the attitude of short-term traders on the London Metal Exchange and of investors in copper shares. The LME price for copper has fluctuated wildly in recent weeks on the on-again, off-again news of a shutdown in African metal production. But shares of copper companies haven't risen significantly.

Early in the year, U.S. copper men, predicting a big oversupply in 1960, said they were prepared to trim production.

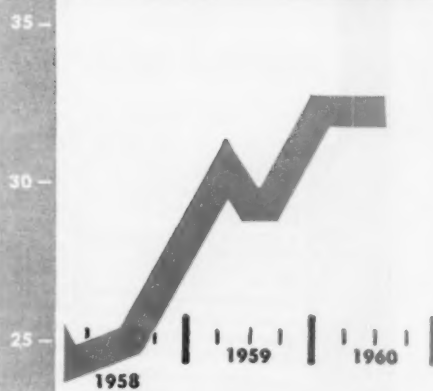
• **Congo Fears**—But the price stayed at around 33¢ a lb., chiefly because traders expected trouble in the Congo. Foreign fabricators stocked up heavily on copper, so foreign producers did not have to push more metal than normal into the U.S. market. This enabled U.S. producers to maintain the price even though demand was slipping.

As long as the Congo turmoil remains unsettled, the producers probably can keep their prices up. Rumors persist, though, that the custom smelters are selling below 33¢ a lb. and any re-

METALS PRICES

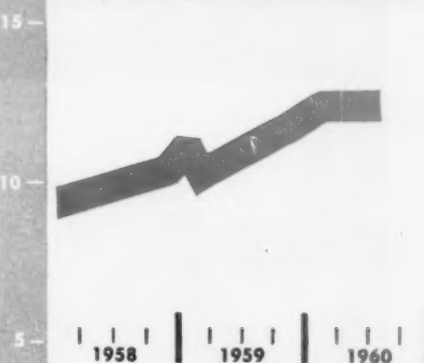
cents per pound

COPPER — Strikes & Scars



cents per pound

ZINC — Moving Up



cents per pound

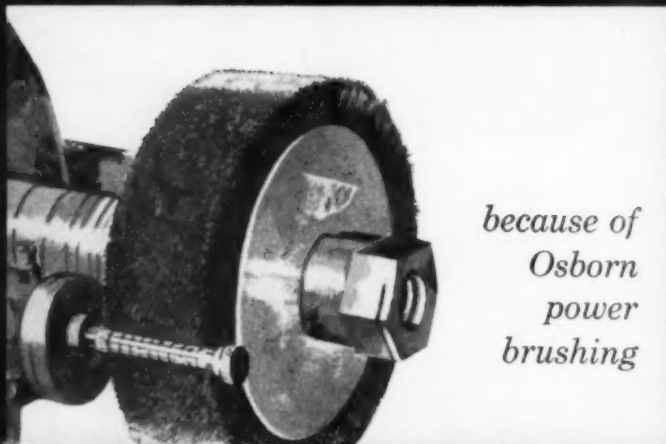
ALUMINUM — Surface Stability



Data: E&MJ Metal & Mineral Markets

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Metal Finishing Machines...and Methods • Industrial Brushes • Foundry Production Machinery

laxation of tension abroad probably would bring a cut in posted prices here. Prices of products such as copper wire have already been trimmed, though not the basic copper price.

• **London Pricing**—The big African and Chilean producers are eager to break loose from the fluctuations of the London market, and they see the Congo situation as an opportunity for price independence.

Currently, daily quotations on the LME provide the cash price for copper for most of the African and Chilean producers—the Union Minière du Haut Katanga is the big exception. But they argue that the price fluctuates too sharply, that the LME—through which a relatively small amount of copper flows—should not set price standards for the whole industry. But they have never been able to come up with a workable alternative.

In 1955, Rhodesian Selection Trust, Ltd. broke away from the LME price to its own fixed price, based on a world average. It held to this system for two years, but finally abandoned it. For one thing, the LME price and the world price average had come close together again; for another, Anglo-American and the Chilean producers continued to sell on LME quotes.

Now the big producers are trying to work out a new agreement that would leave the LME as essentially a hedging operation, rather than a price-setting mechanism.

II. Aluminum

Copper's surface stability holds true for other metals, notably aluminum.

Unlike most other metals, aluminum (chart, page 81) seems headed for a record production year. Each month so far has shown a gain over 1959—notwithstanding the hedge buying before the steel strike. Yet record production—and big exports—may backfire, because mill shipments of sheet and plate are running below a year ago. This week, for example, Kaiser Aluminum shut down one of its potlines. This hasn't had any effect on posted prices yet, but aluminum scrap prices are down and price reductions have been made in the secondary market.

• **Unused Capacity**—One of the aluminum industry's big troubles is that it is running significantly below capacity. Until three or four years ago, it had always operated at close to 100%, with large volume going to the U.S. stockpile. Capacity was already being expanded when government purchasing dwindled and consumption suddenly didn't increase as fast as the pace expected. Now, at 85% capacity, the industry is hurting, because idle capacity costs are high.

The big companies also are threat-

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Due July 15, 1990

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—National Machine Accountants Association, January 1960

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—Office Equipment Manufacturers Institute, September 1959



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ened to some degree by new producers. In the past few years, the Little Four—Harvey, Olin, Revere, and Anaconda—have gained 13% of the industry's capacity. Now a West Coast fabricator, United Pacific Aluminum Co. may put up a new primary smelting plant on the Columbia River, and two other fabricators, Quaker State and Bridgeport Brass, are making studies that might lead to their own production of primary metal.

• **Two-Price System**—There's a big incentive for U.S. aluminum fabricators to make their own metal. Aluminum pig now sells for 26¢ a lb., but U.S. producers deliver it to their European customers for about 23¢ in order to capture markets abroad. So the producers are making about 3¢ more a lb. by selling their aluminum to U.S. fabricators.

What keeps more U.S. fabricators from producing primary metal is the high cost of plant—an estimated \$1,200 to \$1,600 per ton of metal annually.

III. And Zinc

Among the nonferrous metals, the brightest outlook is for zinc (chart, page 81)—although here, too, are signs of price weakness in certain grades. For example, for the first time since early 1958, the market for special high grade zinc used in die-casting is soft. Producers only last week put through cuts on special high grade.




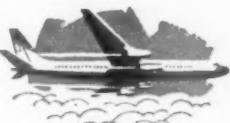







However, the price of prime western zinc, the most common grade, now stands at 13¢ a lb.—the highest it has been since early 1957 (in most of 1957 and 1958, it sold for 10¢ a lb.).

• **Strong Market**—Demand for zinc used in galvanizing has been high, and nearly all continuous galvanizing lines continue to operate full-time. Even though die-casting grades have slipped, zinc men say they will perk up with the introduction of the 1961 car line. If demand for galvanizing and die-casting grades should pick up at the same time this fall, there may be pressure for a rise in prices.

• **Call to Washington**—Lead and zinc producers also are pushing again for passage of two bills, now before Congress, that would tend to insulate—if not boost—prices.

The first bill would subsidize small producers in the amount by which the market price fell short of 17¢ a lb. for lead and 14½¢ a lb. for zinc. The second proposes a doubling of present import duties, permits a further increase if and when prices fall below stated levels. (This would replace the quotas on imports.)

There is strong opposition to these bills from some Administration leaders, but the mining senators are trying to push at least one of them through. **END**

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NOT NEW ISSUES

July 13, 1960

American Can Company

264,000 Shares

Common Stock
(Par Value \$12.50 Per Share)

Price \$39.375 per Share

12,000 Shares

7% Cumulative Preferred Stock
(Par Value \$25 Per Share)

Price \$37 per Share

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Wall St. Talks . . .

. . . about California bonds, Bellanca Corp. prospects, Studebaker-Packard troubles, hot new electronics issues.

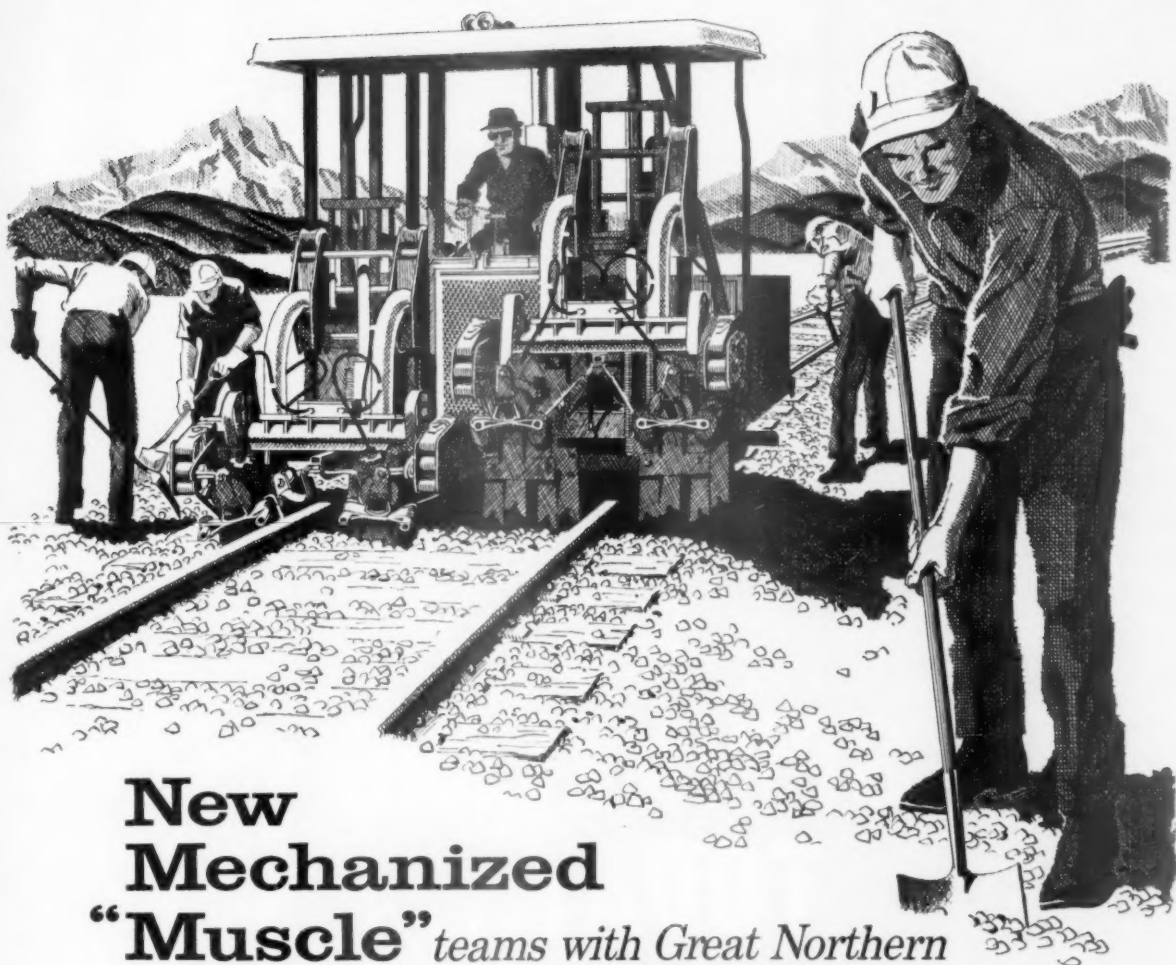
Bond dealers are increasingly concerned that the state of California will run into trouble with its new flexible borrowing policy, which seeks to cut borrowing costs by frequent trips to the market with small offerings. There may be some sour grapes in this talk—big underwriters who have traditionally floated California's issues are seeing smaller firms get into the act.

There's talk that Bellanca Corp., (selling at about 60¢ over the counter), which had its troubles under financier Sydney L. Albert (BW—Aug. 16 '58, p52), may be rehabilitated. The company recently won a \$1.25-million lawsuit against Bankers Life & Casualty Co. of Chicago (the decision is being appealed), and Pres. O. T. Englehart speaks of "several mergers" as possibilities to take advantage of the company's tax loss carry-forward. He says: "I've looked at about 175 companies, making everything from diesel engines to golf courses. Now I'm getting ready to make up my mind."

A surge of TV set sales, in an otherwise soft appliance market, has started brokers talking about a comeback for consumer electronics companies—long regarded as poor relations of the high-flying electronics stocks.

Studebaker-Packard stock is taking a battering. The common sold at 8½ this week (1960 high: 24½), while the preferred traded at 230, down from a peak of 529. A. M. Sonnabend, Boston financier and a director of S-P, has sold all but 1,044 shares of his 7,032 shares of 5% non-voting convertible preferred. Lehman Bros. has sold all its 1,177 shares of preferred, retaining only 150 shares of common. Other insiders also have sold.

Latest in a long list of hot electronics offerings are Espey Mfg. & Electronics Co. and Edgerton, Germeshausen & Grier, Inc. Espey, which marketed 80,000 shares at \$12.50 a share, immediately jumped to a 2-point premium in an otherwise falling market. E.G.&G., which will probably go public early next week, is expected to do even better. But one member of the underwriting syndicate selling the issue privately advises caution because the company's profit-sharing plan—described as "terrific for employees"—may hurt shareholder profits.



New Mechanized "Muscle" teams with Great Northern crews to carry out multi-million dollar maintenance of way program

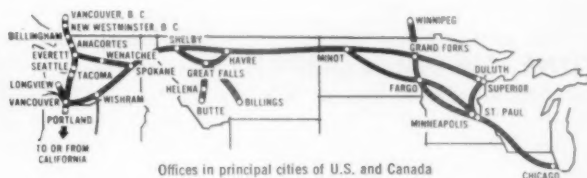
Swoosh! Tons of crushed rock tumble onto a roadbed. Men—aided by a giant, diesel-powered "broom"—move in to spread and level it. Another machine tamps the ballast firmly in between the ties. Miles away, still another mechanized marvel "threads" 25 tons of welded rail into position for a quick change-out. Down goes an old wooden bridge, up goes a new one—steel. Off goes the old paint, on goes a new coat—on a sign, signal or other trackside structure. In a modern shop new signs are readied.

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"shopping list" for men, machines and materials to carry out this work totaled nearly a quarter of a billion dollars in the last five years. That's about one of every five revenue dollars—nearly triple the dividends paid GN stockholders in the same period.

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In the Markets

• • •

Summer Rally in Stock Prices

Seems Still as Far Away as Ever

Wall Street is still waiting for the summer rally. Stock prices this week continued to slide, with many blue chips dropping sharply and the Dow-Jones industrial average falling below 625. Du Pont, for example, dropped under 200 for the first time in two years (1960 high: 266½), and shares of other companies favored by both institutional and individual investors suffered similar setbacks. **For the most part, poor second-quarter earnings have hurt confidence;** even the companies that have managed to improve their earnings have not been bid up by investors.

The utilities have demonstrated real strength, indicating that investors are becoming defensive-minded. But many analysts think that there is no danger of a big decline in the market. They argue that the economy is basically healthy and that there is a good chance for an increase in economic activity because of stepped-up government spending in defense as well as in other areas. They add that if the Federal Reserve Board cuts margin requirements, the present erosion in stock prices might be halted.

• • •

Long-Term Bond in August Refunding?

Here's What Dealers Think About It

Bond prices surged steadily upward this week, and government bond dealers began to predict that the Treasury will attempt to sell a long-term bond in its August refunding. Treasury notes totaling almost \$9.6-billion come due Aug. 15, and how Treasury Under Secy. Julian B. Baird decides to handle this operation will be an important clue to his plans for debt management for the rest of the year.

Herbert B. Jones of New York Hanseatic Corp. says that the Treasury is likely to use its currently swollen cash balance to pay off part of the issue. The refunding, he thinks, will include a \$500-million issue of 10-year bonds, priced to yield about 3½%, and the balance of the financing will be a 1-year note, with a coupon of about 3¼%. He also thinks Baird would like to use his new refunding technique of paying off the entire issue in cash, then selling new bonds. This eliminates speculative trading in "rights."

C. Richard Youngdahl of Aubrey G. Lanston & Co., Inc., is the most bullish on the bond market. He says that a bond in the 8- to 10-year maturity range would have "an excellent reception," and he predicts that as much as \$1.5-billion could be sold. In addition, he says Baird will attempt a substantial advance refunding of the Treasury's wartime 2½% bonds before the end of the year.

Thomas D. Byrnes, vice-president of Chase Manhattan Bank, thinks the Treasury offer may be more com-

plicated. He talks about a three-way financing, with a 1-year certificate tailored to the needs of the Federal Reserve, which together with government investment accounts holds \$5.6-billion of the maturing issue; an intermediate 3- to 4-year note aimed at the bulk of the public holders of the maturing notes, and finally a reopening of the Treasury's 3½% bonds that come due in 1974.

• • •

Mutual Fund Offers Its Salesmen

A Bigger Share of the Sales Charge

The steady slide in mutual fund sales that followed the stock market's drop is forcing fund men to take a new look at their selling methods. This week, the David L. Babson Management Corp., which sponsors the small (\$16-million assets) Aberdeen Fund, revised its commission schedule to give its dealer-salesmen a bigger cut of the sales charge. Babson's action may be followed by funds that face a slippage in sales.

Aberdeen's sliding scale of gross commissions runs from 8½% for sales less than \$2,000, down to 2½% for sales over \$250,000. Previously, dealers received 6% on sales up to \$25,000, lower amounts on larger sales—with the balance of the commission being retained by Babson. Now the dealers' share has been boosted to 7% for all sales from \$2,000 to \$25,000.

Charles L. Bailey, Babson vice-president, says Aberdeen's net sales are running at about \$2-million a month. This includes the face amount of accumulation plans, which have continued to grow and now make up the bulk of sales. This growth should insure a boost in the funds assets, but for the present, with almost half the first year's payments on a contractual plan going to the salesman, the influx of new cash is low. Thus, Babson wants to stimulate single-shot sales, which give the fund an immediate increase in assets.

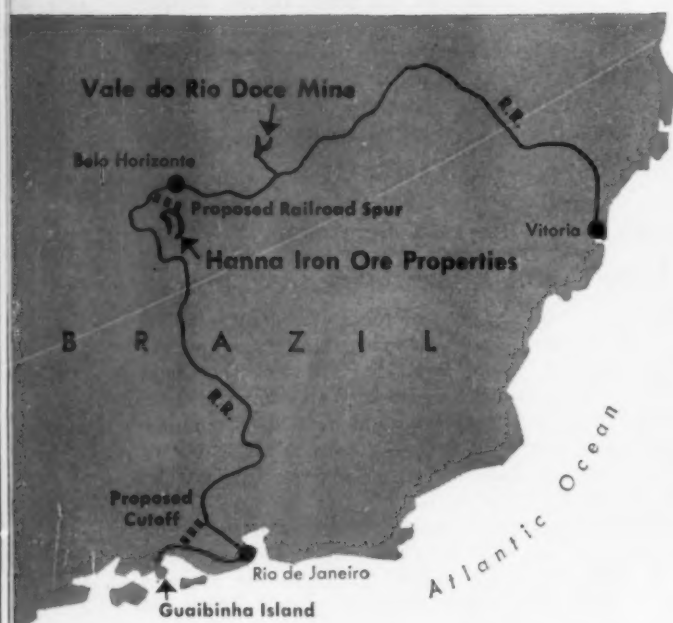
• • •

AT&T Goes to Market Again

With \$250-Million Issue This Fall

American Telephone & Telegraph this week announced a new \$250-million straight debenture issue to be sold in the fall. Its last debenture offering in November, 1959, also was for \$250-million. Utility analysts said the financing was not unexpected, that AT&T's capital requirements—and its need to maintain a proper corporate balance with its subsidiaries, which have been borrowing lately—forces such debt financing every so often. In fact, some analysts look for still another offering—a convertible debt issue—from AT&T later this year or early in 1961.

Meanwhile, Florida Power & Light ran into an investigation over its rate of return. The Florida Railroad & Public Utilities Commission sees evidence that the fast-growing utility is making an 8% return. "We have not told the company to reduce rates," said one PUC official, "but we are undertaking a study of its rate structure and its rate of return." In the past, the PUC has frowned on a rate of return as high as 8%, and it has made FP&L reduce its rates three times since 1957.



ORE RESERVES concentrated in Brazil's state of Minas Gerais have a higher iron content than Mesabi ore has, are near the surface, and can be mined by open-pit method.



Iron Ore Deal Raises Squabble

Opposition to M. A. Hanna's \$40-million project to mine rich deposits comes from super-nationalist centers around government-controlled iron mining company.

Since World War II, U.S. iron miners have spent more than \$1-billion in prospecting and developing new deposits of high-grade ore. As traditional, close-to-home sources have dwindled, the search for new deposits has led geologists from Labrador to Venezuela, from Peru to Liberia, from Tunisia to Mauritania.

Now, in Brazil, M. A. Hanna Co. is preparing a \$40-million project to dig into a 300-million-ton deposit of hematite (map) that assays about 64% iron content, most of which lies on or close to the surface. This is better than ores from the Mesabi Range—which assay between 50% and 60%—and all of it is good enough to go directly into a blast furnace without beneficiating. Initial yearly shipments of 2-million tons of ore are slated to steelmakers in the

U. S., Great Britain, and West Germany.

• **Ups and Downs**—The Hanna project has been four years in the making. At first, the Brazilian government favored Hanna's plans. Brazil has the largest known iron ore reserves in the world, 35-billion tons. With coffee no longer a near-monopoly, Brazil has been looking for other sources of foreign exchange earnings. Iron ore exports were obviously an answer, and the government has been encouraging both foreign investment and increased operation of its own company, Cia. Vale do Rio Doce.

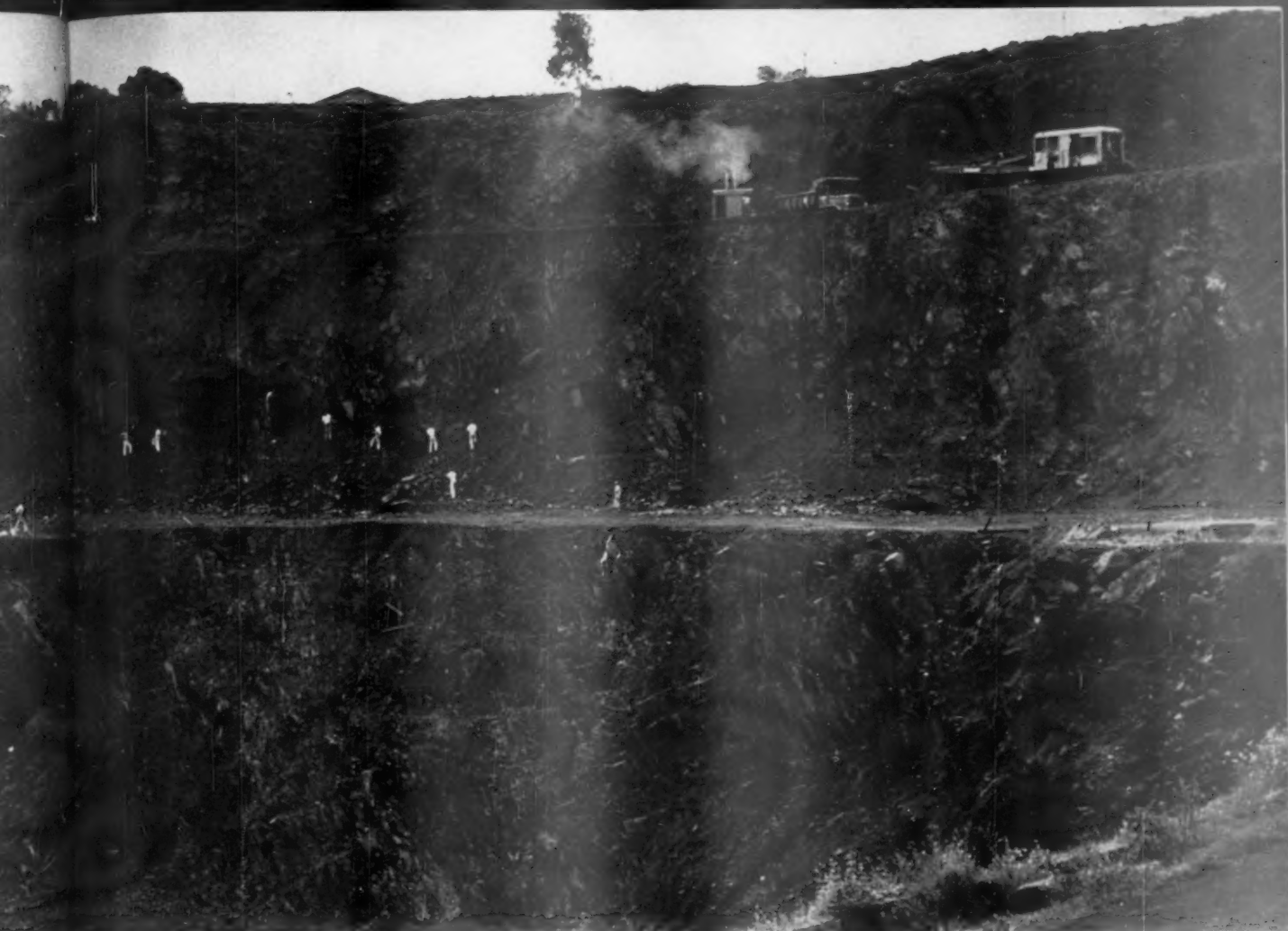
Within recent months, however, Brazilian opposition to Hanna's proposal has stiffened. Some government officials fear that Hanna's plans, which call for increasing shipments up to 20-million tons annually, would deplete

Brazil's reserves too quickly. More to the point, Vale do Rio Doce officials oppose the Hanna project for competitive reasons.

Then, there's the old cry of the super-nationalists about not letting foreign—especially Yankee—business interests strip the nation of its natural resources. In this, the nationalists have been egged on by the Communists, ever ready to stir up anti-Americanism.

Hanna spokesmen in Rio de Janeiro say that Brazil, with its tremendous reserves, need have no fear of rapid depletion, that Hanna will not sign sales agreements with Vale do Rio Doce customers, and that the project would provide 1,000 jobs and eventually \$200-million a year in export earnings.

• **Still Not Sold**—Brazil has yet to be persuaded. Its legislature has appointed a nine-man fact-finding committee to investigate the country's iron potential, with special reference to Hanna. No one seems to know when it will report its findings—but probably not before October, when Brazil will hold an elec-



le in Brazil

tion. This is much too controversial an issue to settle before then.

The outcome is important not only to Hanna but to other prospective foreign investors and to the development of Brazil's extensive mineral resources. If Brazil approves the Hanna proposal, the nation most likely will attract more investors and become a major mineral supplier. Rejecting the plan may hold Brazil far back in developing its mineral resources.

I. Legendary Riches

Brazil's mineral wealth is legendary. It was once the world's leading producer of gold and kept Portugal in luxury for a century. Of greater significance in today's industrial world are the country's tungsten, manganese, mica, tin, aluminum, and other minerals, including the old standby, iron.

Only in manganese, however, does Brazil make much of a world splash. About 500,000 tons, worth \$18-million, are shipped annually by Bethlehem

Steel Co., which owns 49% of ICOMI, a Brazilian company that developed the manganese deposits. A U. S. Steel Corp. subsidiary, Cia. Meridional de Mineracao, also exports manganese.

Brazil has plenty of bauxite and a number of foreign aluminum concerns including Reynolds Metals Co. and Kaiser Aluminum & Chemical Co., have considered Brazilian operations. Right now, Aluminum Co. of America is working on a \$32-million deal with Brazilian millionaire Alberto Byington to set up a 20,000-ton-capacity mill (BW—Jun. 4 '60, p124).

• "Heart of Gold"—Most of Brazil's known mineral wealth is concentrated in the state of Minas Gerais, an area similar in geological structure to the ore-rich Canadian shield. Portuguese colonists pushing inland from Rio de Janeiro discovered gold and diamonds there.

Latter-day prospectors were not long in spotting iron. It turned out to be so plentiful and of such high-quality that the "heart of gold" that Brazilians call Minas Gerais is now referred to as lying in a "breast of iron."

Open-pit mines here supply Brazil's steel mills and foundries, most of which

are situated around Belo Horizonte. From here also come the nation's 4-million tons of iron ore exports, 85% of which are shipped by Vale do Rio Doce through the port of Vitoria. Immense unmapped iron reserves also lie in Mato Grosso, Amapa, and Santa Catarina.

II. Postwar Interest

Since World War II, several foreign companies have considered Brazilian iron projects. Bethlehem scouted the ground, then switched to Venezuela when big deposits were found in the Orinoco Valley and the Venezuelan government eased the path. Hanna looked over both iron and manganese prospects but was nosed out of manganese by Bethlehem, whose 49%-51% partnership with a Brazilian company got under the wire of nationalist objections.

In 1957, a combine consisting of Cleveland Cliffs Iron Co., the Rockefellers' International Basic Economy Corp. (IBEC), and other U.S. interests, plus a Brazilian partner, proposed to invest \$100-million in Vale do Rio Doce. But the government thumbed down the project on grounds that it would lose effective control of the com-

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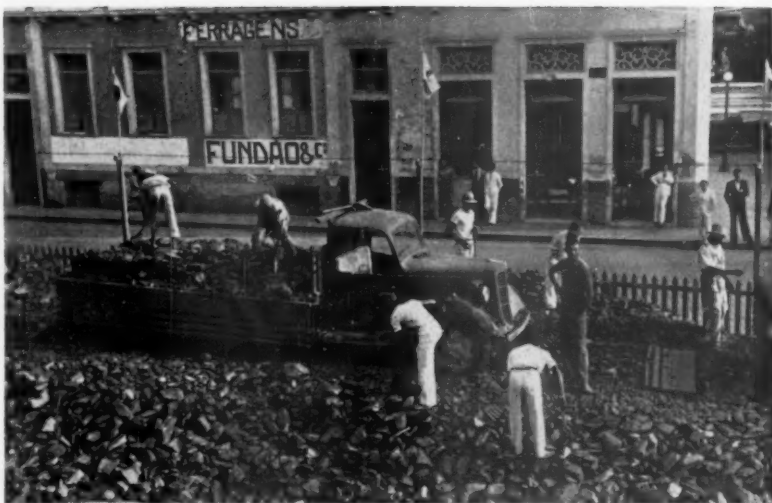
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Toronto, Ontario



IRON ORE from government-owned Vale do Rio Doce mine piles up in streets of Vitoria because of inadequate loading facilities. In its operation, Hanna proposes to build a dock at Guaibinha island, where deep water accommodates 60,000-ton ore vessels.

pany to the U. S. partners. Cleveland Cliffs, of which Cyrus Eaton is the largest stockholder, is Vale do Rio Doce's sales representative in the U.S.

• **Gold Key**—Hanna got involved in its current iron project through a gold doorway on the London Stock Market. In 1956, the company began buying into St. John D'El Rey Mining Co., Brazil's remaining gold producer, with headquarters in London. Hanna had picked up 12% of the 630,000 outstanding shares when other buyers showed up. Leo Model, a New York investment broker, had got into St. John for about 10%.

A third group, the New York brokerage firm of Osborne & Thurlow, began buying, and control of St. John passed from British to American hands. Osborne & Thurlow then unloaded and Hanna, with 51%, acquired control. Minority partner Model remained with St. John as chairman of the board.

• **Driving Force**—The driving force in Hanna behind this move was Hon. Chmn. George M. Humphrey, who had returned to the company from his stint as Secretary of the Treasury (BW—May 31'58, p37). Humphrey had also led Hanna into the Knob Lake-Burnt Creek development on the Labrador-Quebec border in conjunction with Canadian interests in the late 1940s.

When Hanna took over St. John, it got a gold mine operating at a loss. But among St. John's assets were 100,000 acres containing upwards of 2-billion tons of hematite, plus the right to exploit the minerals. St. John's charter dates from 1833, well before Brazil's 1954 Mining Code that reserves subsoil rights to the public domain.

Hanna then sent John W. F. Dulles, son of the late Secretary of State, to

work with local attorneys and consultants to set up export procedures and the organization necessary to start the mining operation. Dulles had been with a mining company in Mexico, heading its lead and zinc operations.

• **Reorganization**—To leave themselves free to concentrate on iron and to bring in partners not interested in gold mining, the new owners of St. John sold the gold operation to a Brazilian company, Cia. Mineracao Morro Velho. St. John retains a 25% interest in Morro Velho.

A subsidiary of St. John, Cia. Mineracao Novalimense S. A., has title to the iron deposits. Hanna plans to reorganize it and bring in a small amount of Brazilian ownership. It will lease mining rights to a new operating company, Mineracao Aguas Caldas S. A.

The operating company will be owned one-third by St. John and two-thirds by U.S. and European partners who will use the ore. So far they are undisclosed, although one is believed to be Ferrostahl, of West Germany. It was unsuccessful earlier in getting its own iron mining operation started in Brazil. The consumers will have rights to the ore in proportion to their investment, 60% of which will be spent in Brazil. Shipments are slated to begin 18 to 24 months after Brazil approves the project.

• **Ore Transportation**—Aguas Caldas' job will be to dig the ore, crush it, and load it onto ore cars. The company will send the ore cars down the wide-gauge Central do Brasil railway to Japeri, at the foot of the 2,500-ft. escarpment that blocks Rio from the hinterland.

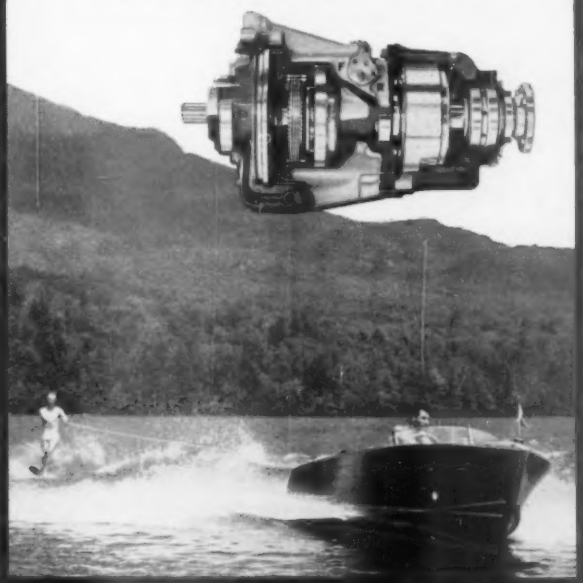
Then the cars will travel along a proposed railroad cutoff (map, page 90)

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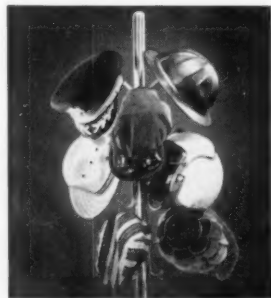
Supply link between inland troops and offshore ships is the new LARC-15, designed and built for U. S. Army Transportation Corps by B-W's Ingersoll Kalamazoo Division. Even loaded with 15 tons of vital cargo, it does 10 mph on water and 30 mph on highway—travels through angry breakers, deep sand, rugged terrain.

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lighter, shorter propeller shaft that helps reduce prices of a new line of pickup trucks. Even now we're working to save the time, labor and money of future generations. The fast cooking of food through electronics, more accurate oil well logging, an economical fuel injection system for automobile and outboard motors—these are just a few of the imminent new products resulting from Borg-Warner long-range research.

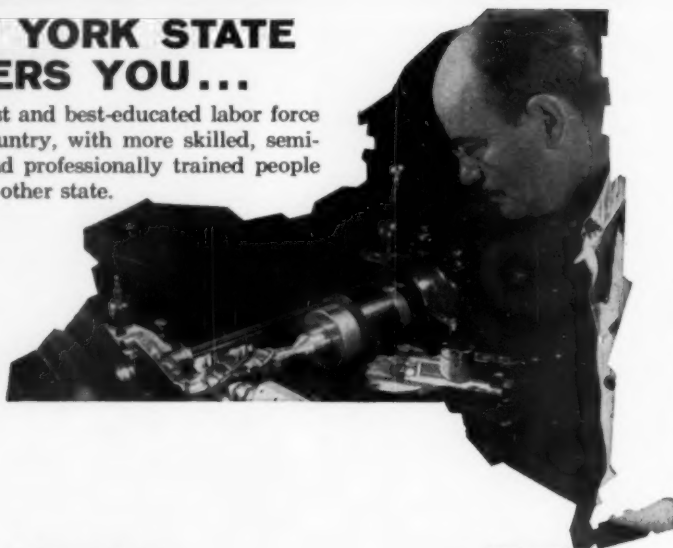


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to the coast, where a dock and loading facilities will be built on the rocky islet of Guaibinha. Deep water there permits 60,000-ton ore vessels to draw up alongside. Aguas Caldas has already secured permission to use the island and will finance construction of the railroad cutoff as well as the rolling stock and locomotives.

Although most mining companies prefer to operate their own railroads, Hanna is willing to use the Central to get government support for the project. The Central is running in the red and the heavy movement of ore would help reduce the operating deficit. Rate negotiations are now under way.

III. Local Opposition

Opposition to Hanna's plans centers about the Brazilian national iron mining company, Vale do Rio Doce. Nationalists and company backers say that if anyone is going to dig holes in Brazil's landscape, it should be Vale do Rio Doce, which last year shipped 3.2-million tons of ore valued at \$36-million and turned a 40% profit. It hopes to increase exports to 4.5-million tons this year and is shooting for 20-million tons ultimately.

Hanna's opponents argue that the U.S. company, with its 60,000-ton ore carriers, could easily outsell Vale do Rio Doce, which so far can handle nothing larger than 12,000-ton vessels at its Vitoria docks. Hanna has countered by promising to sign no sales contracts that would interfere with sales by Vale do Rio Doce. A Hanna spokesman says, privately, "We would be silly to try to put a government company out of business."

• **Other Ventures**—In addition to the advantages to Brazil that Hanna says its project already offers, the company has under study other joint industrial ventures in Brazil, such as steelmaking. In the past, foreign proposals of ore exports have run into Brazilian insistence on a local steel mill as part of the deal. Brazil's colonial experience of supplying gold to Portugal has left its imprint, and it does not want to become a mere source of raw materials for other people's industries.

No Brazilian official, spokesman for Hanna, or interested U.S. government official will venture to guess whether Brazil will give Hanna a go-ahead or when. Some Rio observers think Hanna's chances are good. The project has had Brazilian Pres. Kubitschek's blessing from the start. Officials of the Central do Brasil railroad side with Hanna, as do several influential ex-government officials, now in private business. But both candidates for president, Marshall Henrique Lott and Janio Quadros, have objected, at least for the record. **END**



Unusual application of famous Bendix Electric Fuel Pump dependability is on miniature train operated at Audubon Park Zoo, New Orleans, La.

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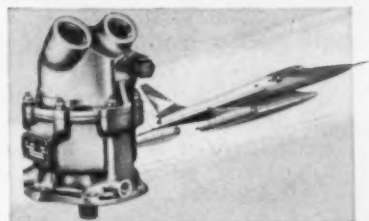
From miniature trains to supersonic missiles—from jet aircraft to mechanical cotton pickers—you'll find a wide variety of Bendix pumps helping vehicles of all kinds function more efficiently. Whether feeding fuel or hydraulic fluid, these pumps help put the "go" in transportation—much like the human heart pumps life through our bodies.

Hydraulic pumps, built by our Hamilton Division, Hamilton, Ohio, pump hydraulic fluid to actuate aircraft landing gear, flaps, ailerons, "elevators", and dive brakes. On missiles, they feed hydraulic fluid into devices that operate controls to keep the missile on course. These pumps deliver from 1 to 30 gallons of fluid a minute and operate at speeds up to 12,000 r.p.m. Yet, they combine light weight with ruggedness and power. On a typical bomber installation, four pumps—weighing about 16 pounds each—provide the equivalent of enough power to lift

a 3000-lb. automobile 100 stories high in 36 seconds.

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The Bendix® Electric Fuel Pump, made by our Eclipse Machine Division, Elmira, N. Y., is used on sports cars, buses, boats, trucks, fire engines, and other such vehicles. By preventing vapor lock and providing even fuel flow, these pumps help make possible smooth engine power and performance. They're also used in connection with gasoline heaters, coffee makers, air conditioning sys-



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tems, and other diverse equipment.

Our Bendix-Pacific Division at North Hollywood, Calif., contributes an aircraft hydraulic hand pump which serves as a power source for operating aircraft landing gear, flaps, etc.; for ground support equipment, and as a standby unit. Our Lakeshore Division, St. Joseph, Mich., manufactures constant pressure, piston-type pumps for self-propelled agricultural combines.



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In Business Abroad

• • •

Eisenhower's Latin Aid Program Goes to Congress Next Month

Pres. Eisenhower will ask Congress next month to approve, at least in principle, his new aid program for Latin America (BW-Jul.16'60,p111). The plan may carry a price tag in the neighborhood of \$300-million to \$500-million, spread out over an indefinite number of years.

The program's backers are optimistic over its prospects in the special Congressional session. They say a flat rejection is practically out of the question, though the budget question may be sticky. The Administration will ask for an "expression of sentiment" on the program's broad outline and on a general dollar figure. Drafters of the plan say it needs a "substantial" budget to have any chance of success.

Whatever happens, Brazil's Pres. Kubitschek and Canada's Liberal Party leader Lester Pearson already have suggested that Pres. Eisenhower's proposal is too little and too late.

Over-all administration of the aid would rest with the new \$1-billion Inter-American Development Bank. In addition to IADB loans, aid would be channeled through the State Dept.'s Development Loan Fund and the International Cooperation Administration.

The program's short-range emphasis would be on projects such as housing and agricultural development. Longer-run, it also would aim at spurring more private investment.

• • •

Cuban Affiliates of U.S. Companies Struggle Along Under Castro Regime

While the political crisis swirls about their heads, (page 28), those U.S. businessmen still operating in Cuba are getting on as best they can, with varying degrees of success. Most agree that expropriation can come at any time.

Cia. Cubana de Cemento Portland (Lone Star Cement) is doing a brisk \$750,000-a-month business, 90% of it with contractors controlled by the government. It extended about \$1.3-million in credit until last November, when it "got tough" with the revolutionary regime, refusing to give more than 30 days credit. Since then, payments have lagged \$50,000 monthly at most.

An affiliate of Remington Rand, which previously did a \$1.5-million annual business in office machines, is now barely hanging on because it can't get dollars to pay for imports. Its last shipments from the U.S. were in February, and it has still not received the \$67,000 it needs to pay for them. The manager says that the Banco para el Comercio Exterior de Cuba, which last week became sole importer for most products, "has inherited all my problems."

A sugar company, which withholds its name, has had all its cane lands taken and is now merely trying to save as

much as possible for its stockholders. But with wages increased by government order and sales to Russia at prices below former U.S. subsidized price, the mill owners are taking a financial beating.

• • •

Better U.S.-Polish Economic Relations Expected to Follow Claims Settlement

The outlook for expanded economic cooperation between the U.S. and Poland has brightened with a Polish agreement to pay \$40-million in settlement of American claims on property seized by the Communist government 14 years ago.

Though these claims have inhibited economic relations between the two countries, the U.S. in the past three years has loaned \$61-million to Poland through the Export-Import Bank. It also has sold the Poles surplus farm products valued at more than \$293-million.

The settlement provides only part compensation to U.S. citizens and corporations for the several hundred million dollars worth of property seized. Only claims for less than \$1,000 will be paid in full.

Among corporations expected to benefit by the new agreement are Jersey Standard, Corn Products, Colorado Fuel & Iron, International General Electric, and Socony Mobil. Poland also has agreed to negotiate directly with American holders of Polish government bonds issued between 1919 and 1939. These are estimated to be worth some \$45-million.

• • •

Soviet Cut-Rate Oil Offers in India Force Westerners to Reduce Prices

Pressure from Soviet competition has forced at least two Western oil companies to offer India reduced prices on crude oil imports.

Standard-Vacuum said it has offered New Delhi a "substantial" reduction. Britain's Burmah-Shell said it was willing to drop prices 7½%. Caltex, the third major company operating in India, declined to comment.

All three companies have been negotiating with New Delhi (BW-Jul.16'60,p117) since refusing several weeks ago an Indian request to refine cut-rate Soviet oil. The Russians are offering crude and products at prices 10% to 15% below world prices. More important, they have agreed to accept payment in rupees.

Negotiations were continuing behind closed doors at midweek with the Indians said to be pressing for further concessions from the companies.

• • •

Nationalization Move in Egypt

Pres. Nasser has nationalized all Egyptian-owned importing and wholesaling enterprises that deal in pharmaceuticals and chemicals. Observers interpreted the move as a beginning of Nasser's plan to nationalize all importing and wholesaling companies in the United Arab Republic.



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Sanders Eats Raw Fish



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For a man without the experience of McGraw-Hill Bureau Chief Sol Sanders, Tokyo duty would literally be hard to swallow at times. Take, for example, his assignment to get figures on Japanese transistor radio shipments to the U.S.

The story was hush-hush. Manufacturers were afraid it would start tariff talk. Where to begin?

Sol did what any veteran reporter would. He called a friend in the newspaper business: a staff member of the *Oriental Economist*. But in Tokyo you don't necessarily conduct business by phone. First comes lunch . . .

A traditional dish—raw fish—was nothing new to Sol. He swallowed, smiled—and got a lead that soon gave McGraw-Hill readers the inside story on Japanese transistor radios.

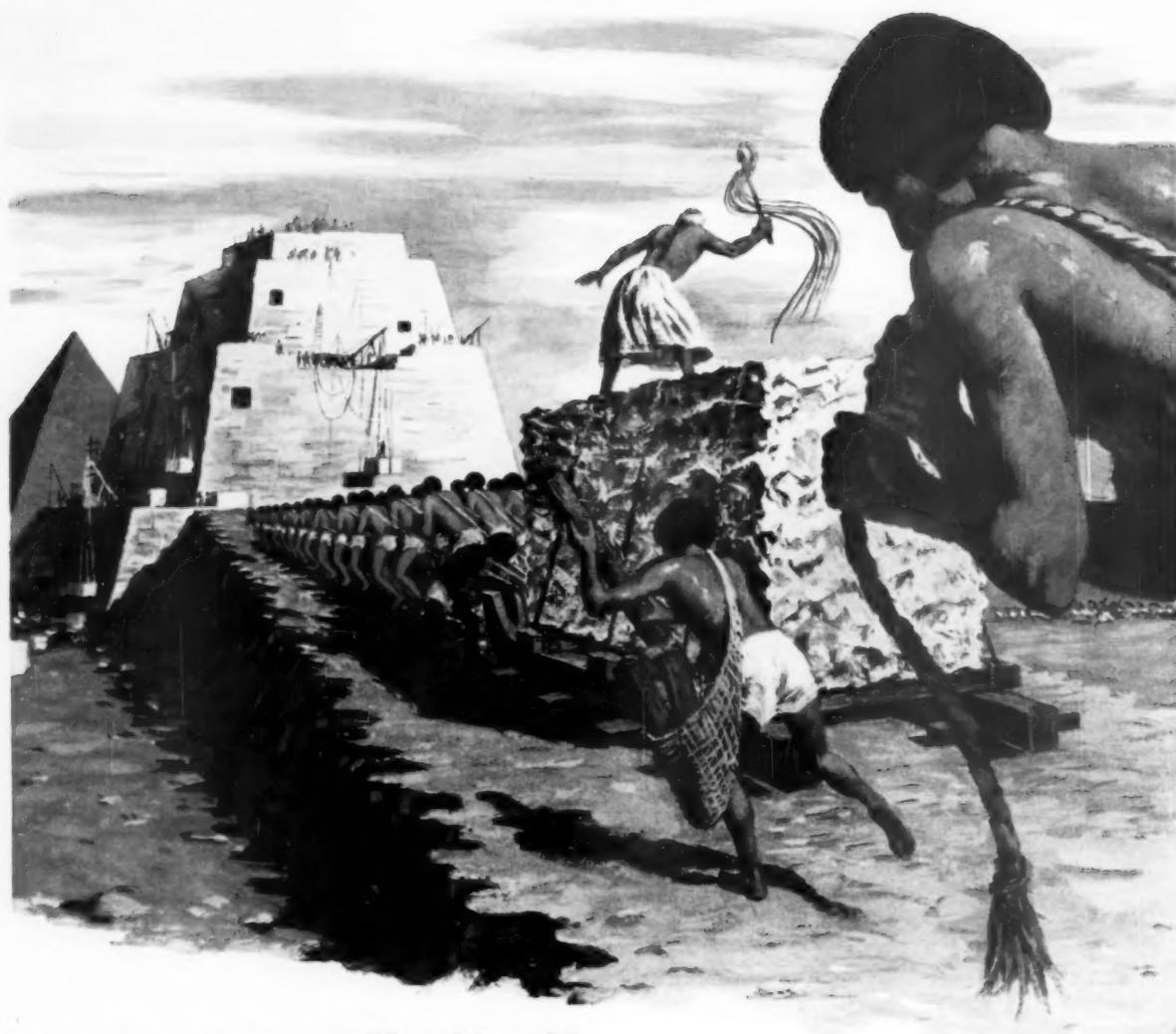
Sol takes his Tokyo assignment seriously, counts many close friends among his Japanese contacts. He has found that friendship and courtesy can break down communication barriers, help him keep on top of vital business news.

Result: if there's a Japanese news break this afternoon, McGraw-Hill editors will know it tonight—and readers will get the names, dates and dollars involved in the next issue.

Sol is typical of the men the McGraw-Hill World News Service puts in key spots: seasoned veterans at getting business news. There are 203 World News correspondents overseas who get the whole story—and so do our readers. This is one of the reasons why more than one million key businessmen pay to read McGraw-Hill publications.



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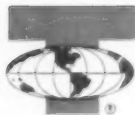
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PERSONAL BUSINESS

BUSINESS WEEK

JULY 23, 1960



Like many other vacationers recently, are you seeking out far places, instead of staying put at the family summer house?

If this means renting or even selling your summer place, you'll want to be aware of a possible tax tangle—and some saving advantages. Tax deductions are often possible, but you must keep your personal books complete and up to date.

Say you have rented your summer house for the entire season. When you file your tax return for 1960, you report the rent you receive as income, but you can deduct the expenses of maintaining the rental property. You may even show a loss. The question: Just how much of a deduction does the Internal Revenue Service allow?

Suppose your expenses break down this way: Before your tenant occupies, you spend a considerable sum getting the house into shape for summertime (repairs, painting, etc.); during the summer, you pay for ordinary maintenance and minor repairs; after the season, you pay for buttoning down the house for winter. Depending on when you put the house up for rent, you should be able to deduct at least 50% of these expenses, in some cases all of them.

The U. S. Tax Court has said, in substance, that if you put a summer house up for rent at the start of the year (January), you can deduct all expenses, covering the whole year. If you put it up in April, you're entitled to 75% of the expenses, and if you put it up in July, you can deduct 50%. "Putting it up" means placing in the hands of a realtor, or advertising in the local paper, or maybe simply erecting a "for rent" sign.

If you rent the summer house for only part of the season—say, one month out of three—you would be entitled to deduct at least a portion of expenses, covering the period of rental. In all these cases, a good deal depends on the facts of the particular situation—and your ability to prove them by adequate records.

As a footnote, remember that real estate taxes and any mortgage interest on your summer house are fully deductible, in all cases.

What if you sell your summer house at a profit? Can you avoid the 25% maximum capital gains tax, if you buy another summer place at least as expensive as the old? The answer is "No." In selling one house and buying another, you can escape taxes only if the deal involves your regular full-time residence—not a summer house, winter ski lodge, or the like.

This limitation holds true even where you sell your main residence and buy, instead, an expensive summer home.

—•—

Investment scene: A possibility you may want to discuss soon with your banker or other adviser is the federal government's invitation to individuals to invest in mortgages insured against loss by the Federal Housing Administration. Earnings here could be more than 5% (page 58).

This is a "first," since FHA's rules previously allowed only banks and other financial institutions to own these investments.

You would enter the picture by buying one or more mortgages from the bank or other lender that had financed the home buyers; you'd pay the lending institution a fee (probably $\frac{1}{2}$ of 1% of the interest rate on the mortgage) to cover the collection of installments and the handling of the home buyer's account. Since the present ceiling on FHA-insured mortgages is $5\frac{3}{4}\%$, you'd likely clear $5\frac{1}{4}\%$ on your investment; you could clear

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

JULY 23, 1960

even more if you bought the mortgage at a discount—a likely possibility.

If a mortgage went into default, however, FHA would follow its usual practice of giving the investor debentures that have limited marketability.

You'll want to check closely with your adviser on this point.

—●—

If you're starting now to plan the financing of your children's college education, you might want to look into a new type of endowment plan offered by the Home Life Insurance Co. Tailored to help meet rising college costs, it offers a rider with a "loan" feature giving you seven additional years to accumulate funds (BW—Jan. 10'59, p105).

Here's how it works. Say you're 35 and you have a youngster age 8. You place a \$10,000 rider on a whole life policy on yourself and pay \$658 annually (excluding dividends). The rider matures when your child is 18 and ready for college. By that time, you have paid in \$6,580, and the company starts paying out \$2,500 a year in eight equal installments (\$1,250 each) for four years. You continue to pay premiums until your child is 25, with your policy's cash value as collateral. If you die or become disabled, the full benefit is paid.

To get the same amount of money at age 18 under standard policies, a parent would have to pay about \$1,064 a year on a 10-year endowment.

Other companies are expected to offer similar plans soon. You might want to talk over new developments with your insurance broker. Some savings banks also are coming up with special savings programs geared to future college costs.

—●—

Thinking about using the new "drink-a-meal" weight control products (powdered food concentrates soluble in water) to lose a few pounds? If so, don't be surprised if your physician frowns on the idea.

Some specialists are firm in their opposition—saying that, while these products do furnish needed protein, minerals, and such, their use causes consumers to miss out on several important parts of the digestive process. Also, as soon as the formula diet is stopped, the user's weight is apt to go up "automatically."

Nutrition experts support, instead, educating overweight persons to eat the proper foods and trying to discover the basic reasons for being overweight. Note: Drugs that numb appetites are also considered of secondary importance in losing weight; some physicians say they may be harmful.

—●—

Potpourri: In the face of a new warning by a leading U. S. scientist, the American Dental Assn.'s Council on Dental Research reaffirms its view that periodic use of x-rays in dentistry isn't harmful . . . Jumbos and Jackasses, a lively history of conventionering and political warmaking in the U. S., by Edwin Hoyt, is sharp, timely (Doubleday, \$5.95) . . . Studebaker-Packard recently offered its stockholders a \$100 discount on the purchase of a company-made car; IRS advises that the \$100 is probably taxable as income to the individual, though there hasn't been a firm ruling yet . . . Institute of Life Insurance says only about three out of 100 people are turned down for coverage these days . . . A signal or distress flare, 15 times as bright as a railroad flare, shoots from a hunter's rifle or shotgun, comes in nine sizes (Marsh Coulter Co., Frazer, Mich., 3-pack \$2.95).

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Kansas City, Mo.	Oakland, Calif.*
	Salisbury, N. C.

*These plants operated by National Container Corporation of California, subsidiary of Owens-Illinois.

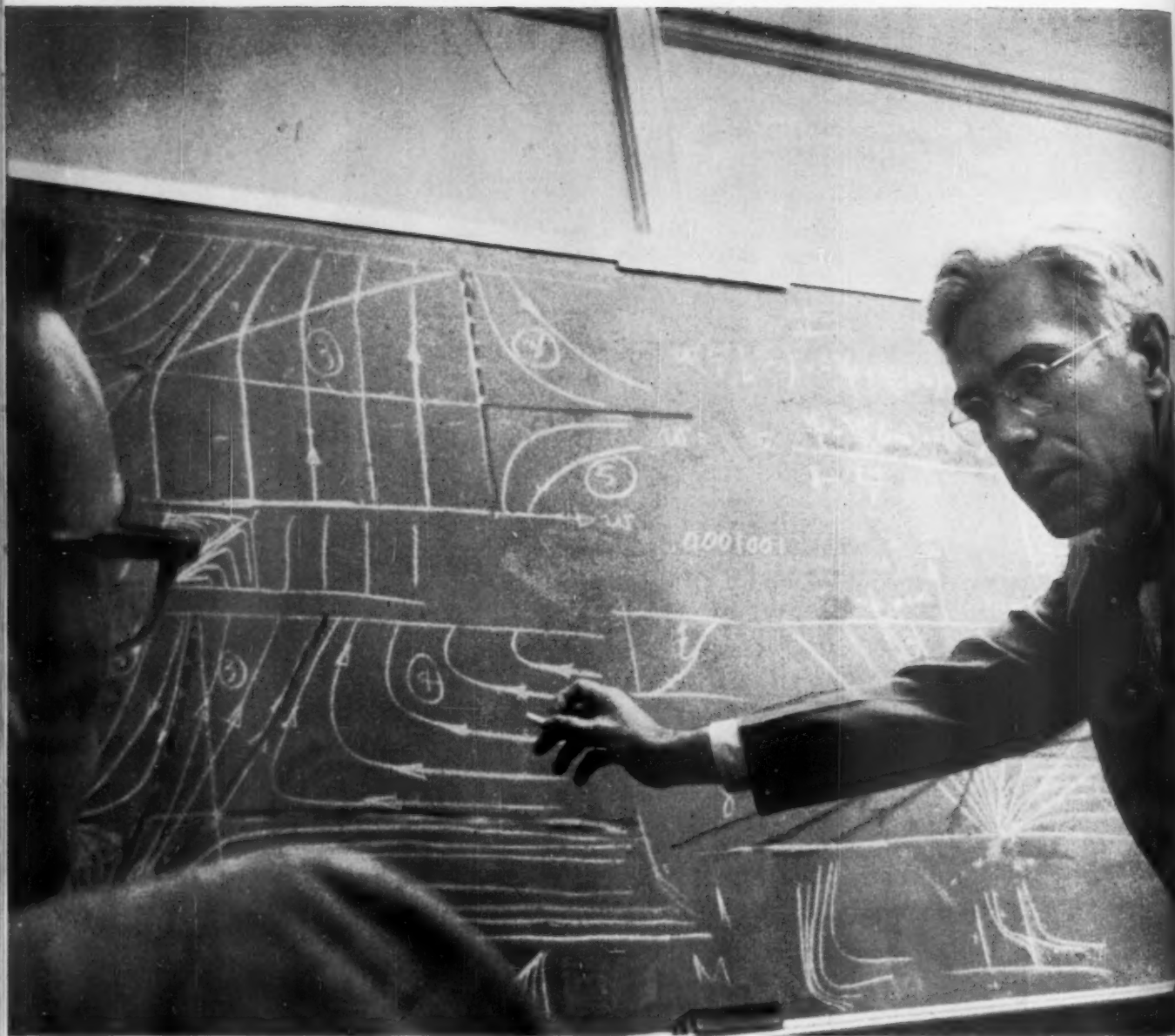
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RESEARCH CENTER has divisional status in new Chance Vought setup aimed at building diversification through broad-based research.

Chance Vought Stakes Its Future

It's virtually axiomatic in today's aircraft industry that airframe manufacturers operate with a sword of Damocles over their heads. At any instant, the government can let the sword fall without warning—and just a few big contract cancellations can reduce a flourishing business to a shambles overnight.

Generally, manufacturers shrug this off as a necessary hazard of their business. They talk of the danger, but until the blow comes they rarely face up to the problem of how they will pick up the pieces.

Chance Vought Aircraft, Inc., struck by such a precipitous blow a year and a half ago, and unprepared with alternatives to take up the slack, went almost frantic in its efforts to recoup. Gradually it has pulled itself to its feet again, using as straps to hoist itself a massive emphasis on research and an extensive diversification—both reflected in the pictures above. There were so many changes necessitated by the painful process of recouping, however, that when other large Navy contracts expire next year, Chance Vought executives

are confident they won't be caught off balance again.

• **Double Blow**—The government's sword fell on Chance Vought on Dec. 17, 1958. In two days, the Navy canceled \$116-million in contracts—20% of the company's entire military backlog (BW—Dec. 27 '58, p. 26). The cancellations were bitter news to Pres. Frederick O. Detweiler (cover), who only six months before had told New York security analysts: "... the Navy does not allocate its budget on the basis of friendship ..."



MAINSTAY of business is still Navy's F8U-2 Crusader fighters; this F8U-1 is set to take off from carrier Franklin D. Roosevelt.



SPACE hardware is Chance Vought's big bet for future; it's working on things like Scout missile and modular space lab.



CIVILIAN lines are led by mobile homes; ABC trailer in foreground is made by one of company's three mobile home makers.

e on Research Push

What hurt most was that the two contracts the Navy cut off—a \$38-million contract to build a Mach-2 fighter plane, the F8U-3, and a \$78-million contract for work on Regulus II, an air-breathing submarine-launched missile—were developmental in nature. Chance Vought was counting on them for their "follow-on" business possibilities.

Sales impact of the cancellations, Detweiler said at the time, would not be fully felt until 1960. But for employees, the impact was sudden—some

1,400 pink slips within hours, and a continuing stream of them until the work force of 16,500 at the Dallas plant headquarters had been cut to about 7,000.

Top management of the third oldest aircraft name—it became an independent company only in 1954 when it was spun off from United Aircraft—started a frantic drive to recover what it could, scouring the nation for subcontracts or anything else to pick up sales dollars. Detweiler, looking back, thinks the search for subcontract work was a

good idea, but it was done under panic conditions, and "the new business was certainly not proportional to the amount of work we expended."

• **Hindsight**—By hindsight, the danger warnings should have been apparent. The Navy, wanting a Mach-2 fighter plane, offered its specifications both to CV and to McDonnell Aircraft. McDonnell, with the F4H, took the tack that such a plane required two engines and two men. CV came up with the single-engine Crusader III (F8U-3 in Navy language), touted as lighter and slightly cheaper than McDonnell's. The Navy bought the two-man, two-engine concept.

The Regulus II was an interim deterrent weapon project, which everyone knew would be outmoded by the Polaris, if Polaris proved out. So when the Navy's research money started to get tight, the Regulus was one obvious place for it to start shaving funds.

• **Keys to Salvation**—Amid the rash of layoffs and frantic junkets for immediate business, Chance Vought management hit on two keys to recovery. It pulled long-range diversification plans out of the "mull" basket and put them into the "action" basket—realizing that the company had to move fast toward diversification to survive.

Detweiler decided to gamble on bolstering Chance Vought's activities in the process control field by investing in a bright young data processing company, and by buying up a number of mobile home manufacturers for their immediate sales possibilities (BW—Mar. 19'60,p62).

Diversification, of course, was a long-range aim; but it was also something of a stopgap until the other half of the recovery process—reoriented research—could start to pay off.

Chance Vought also had to get its military house in order as quickly as it could, to take advantage of the possibilities offered by the coming space age. The way to get federal money for space research is to have an extremely far-sighted research organization; federal dollars are going more and more to companies working on "far-out" devices on the fringes of scientific advance. For Chance Vought, this meant a big expansion and complete reorganization of its research.

I. Early Probing

Research was not new to Chance Vought, nor did its research diversification start with the cancellations. But in retrospect, Chance Vought management sees the 1958 blow as probably the best thing that ever happened to the company's research effort. It cleared the way to fundamental conclusions that might have been reached with less pain three or four years later. But, how-

ever painful, it served to put CV close to the vanguard, rather than the rear ranks, of aircraft companies converting their research activities to new demands.

• **Navy Specialist**—For 43 years—as a subsidiary of United Aircraft and as an independent company—Chance Vought had been a prime supplier of high-performance aircraft to the Navy. Since 1917, virtually every Navy aircraft carrier had Chance Vought planes—craft that reflected a high degree of specialized research effort, but not the same sort of research capabilities needed to do space research.

Even before the 1954 spin-off from United Aircraft, CV knew it would eventually have to develop products for all the armed services, not just the Navy. But at that time, reorientation was just a topic of informal conversation.

In September, 1955, Chance Vought management met with new company directors at a quiet ranch resort in West Texas to discuss the company's problems and future.

• **First Ventures**—It wasn't until early in 1957, however, that first steps toward diversification studies began—and progress wasn't notably fast. The company looked at commercial aviation, home building materials, pleasure boats, prestressed concrete—and ticked them off one by one as impractical. It negotiated with several going aircraft manufacturers for acquisition, but talks fell through. Starting in March, 1958, it attempted to build a going electronic capability from within.

CV's ground rules for new ventures were fairly simple: It wanted to get into technical, complex manufacturing fields in which its particular talents would shine and its shortcomings in marketing experience and high-volume mass production would not handicap sales.

One growth field that fitted these rules was industrial automation—use of computers to control industrial processes, such as oil refining. In mid-1958, it set up in California a wholly owned subsidiary, Genesys Corp., to stake its claim in the field. Genesys, however, was not a rousing success.

• **Frenzy**—Then came the end-of-1958 cancellations—and a frenzied search through the Commerce Dept.'s code of industry for ideas on businesses to enter. Long-range planners seriously examined some 340 different industries to produce a tentative list of ventures for detailed investigation.

II. Blueprint

By May, 1959, Chance Vought management was ready with a plan to present to the board for diversification and research reorientation.

It was based on the premise that CV would have to do four basic things:

- Resign itself to greatly reduced earnings and sales through 1961, at least—as a result partly of the cancellations, and partly of failure to get new business in 1957. (Sales slipped from a record \$333-million in 1958 to \$225-million in 1959, were off again in first-half 1960.)

- Get in position at once to try to anticipate fast-changing Defense Dept. requirements.

- Face up to the disappearance of the traditional middle-sized company from the aircraft scene—and, if it hoped to survive, hustle to catch up to competitors already two to 10 times its size.

- Change its basic business approach radically—and fast.

- **Reorganizing**—Translating these recommendations into action, the board a year ago started to reorganize Chance Vought.

The company's new divisional line-up reads like this:

An Aeronautics Div., concentrating on development and production of products that operate within the earth's atmosphere—including the Navy's Crusader II aircraft (not affected by the 1958 cancellation), nuclear-powered aircraft, new aircraft systems, and anti-submarine devices.

An Astronautics Div., handling development of hardware to operate outside the earth's atmosphere. Currently it has contracts with the National Aeronautics & Space Administration for development of the Scout missile, a low-cost research rocket, and with the Air Force for the TS-609, a modified Scout to be developed as a four-stage, solid-fueled satellite launcher. CV Astronautics is also working on development of a manned missile system.

A Range Systems Div., a service organization that specializes in operating tracking and launching sites, target drones for missile development (Chance Vought last week got a \$3-million contract for extension of drone services), and a "tracking ship" assigned to the Air Force's Pacific Missile Test Range.

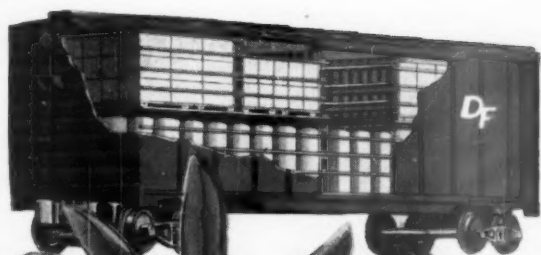
An Electronics Div., dealing primarily in military electronics, with products ranging from specialized antennas to sophisticated missile controls.

A Research Center seeking the basic knowledge needed for future developments.

- **Military and Civilian**—It's in these five divisions that Chance Vought's big bet on its long-range research capabilities is concentrated. Grabbing more of the vital civilian market—which Detweiler hopes will account for half of the company's earnings by 1970—depends less on basic research than on product development.

Civilian business is the province of three subsidiaries:

Information Systems, Inc., an industrial control and computer product sub-



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subsidiary aimed at getting a foothold in the fast-developing automation field. It was formed by merger of Genesys with the recently acquired Information Systems, Inc., and the latter's affiliate, Panellit, Inc.

National Data Processing Corp., of Dallas, a small company working on problems of bank automation; it holds a contract for automation of the San Francisco Federal Reserve Bank system. Chance Vought bought 51% of the company's stock for about \$250,000, has lent it several million dollars for expansion.

Vought Industries, Inc., the subsidiary producing mobile homes, set up to provide immediate income.

• **Goals**—With these five divisions, and three subsidiaries, Chance Vought has set itself impressive goals over the next decade. By 1964, it hopes to double 1959 earnings, and boost 1959's \$255-million in sales past the \$400-million mark—including about \$265-million in military sales, \$144-million to nonmilitary customers.

The goal for 1970 is \$600-million in sales, split three ways—one-third in astronautic hardware, one-third in aeronautics, one-third nonmilitary.

III. Research to the Fore

Whether Chance Vought can reach these goals depends on how well it can make the new master plan work. In the nonmilitary end, the research job is relatively simple—a matter of concentrated engineering, or developmental research. The divisions operating in the military framework will have a much rougher time; to make headway against hot competition, they will have to come up with a really topnotch research effort.

These facts of life in defense industry have changed Chance Vought's whole approach to research. Before the "rains"—the company term for the 1958 cancellations—its research was admittedly "on-again-off-again," and heavily development-oriented. A propulsion scientist working on a basic research problem never knew when he would be pulled off to tackle a "crisis" hardware program.

• **Rush**—Now the Research Center is a separate division. Carefully selected scientists are allowed, even encouraged, to plot their own research programs. This, says Fred Esenwein, a company scientist, offers "the opportunity any research scientist craves. It gives him unlimited backing to do the thing he likes best."

Announcement of the center brought a scramble among company scientists for staff positions. Associate Director H. S. Gibbons, heading up the center until a "man of national stature" can be appointed director, says 95% of his staff

positions were filled in the first few days. Esenwein, who had worked in the propulsion laboratory, "burned my bridges behind me to get into it."

• **Money**—One reason for his enthusiasm is undoubtedly the monetary support behind the research push. Despite its currently declining sales and earnings, Chance Vought has boosted its research budget. In 1959 it allocated \$7.3-million for research (against \$3.3-million in 1957), and will spend about the same amount this year. In 1961, Detweiler says he'll jack up the research budget another 20%. Chmn. C. J. McCarthy told *BUSINESS WEEK* "I wish we could afford even more."

Currently, and for the next few years, CV's yardstick is to budget 3% of its military sales dollar to R&D (including money spent on unsolicited proposals to federal agencies).

Detweiler estimates that some 20% of CV's work is now of a research or development nature—but this figure will have to climb steeply if the company is to keep pace at the frontiers of technology. In the past, government or university labs took care of most of the aircraft industry's research problems. But, says Gibbons, "Our future today is literally tied up in research. We cannot depend on waiting for others to do it for us."

• **Accent on Space**—Chance Vought has staked out five broad areas of basic research to work on, organizing the Research Center into these sections: Aerophysics, Energy Sources, Material, Electronics, and Life Sciences. About 75% of the R&D projects, however, now relate to astronautics—partly because the imminence of man's space exploration creates such a pressing need for new knowledge in this field.

Aerophysics, for example, is deep in problems involved in man's entry into other planet systems. The Life Sciences section has built a space capsule trainer to simulate conditions faced by the operator of a returning capsule, is now working on circuits using algae to produce oxygen as well as provide a possible food source. Research projects in other fields include fuel cells, antisubmarine work, and an optical scanner.

The company also has on tap an impressive list of specific developmental projects for the military. It announced last month a \$3.3-million contract to develop actuators for the Air Force's solid-fueled Minuteman ICBM, and in-plant checkout equipment for Titan ICBM guidance equipment. For the Navy, it's investigating possible use of satellites in submarine detection, and is working on a Video Correlator system, said to increase radar range greatly, that may be installed on the Navy's Crusader fighter planes.

W. P. Thayer, vice-president and general manager of the Aeronautics Div.,

says Chance Vought is awaiting a decision by the Air Force on how to proceed with development of Slam, a nuclear-powered weapon system.

IV. Test Ahead

Pres. Detweiler concedes it's not possible yet to predict the payout on any one research project—the harvest, he says, is just starting. But there's no question that he and the rest of CV management regard research, plus the recent corporate reorganization, as the company's road to salvation.

How long the company can hang on if its research doesn't begin to pay off in big sales dollars could be the next crucial problem. The Navy Crusader fighter series—with a fourth version, the F8U-2N, due to join the fleet this year—continues to be its "most important program." By the time the big Crusader contracts expire in 1961, the research organization will have to have substitute programs ready—or CV will face drastic consequences.

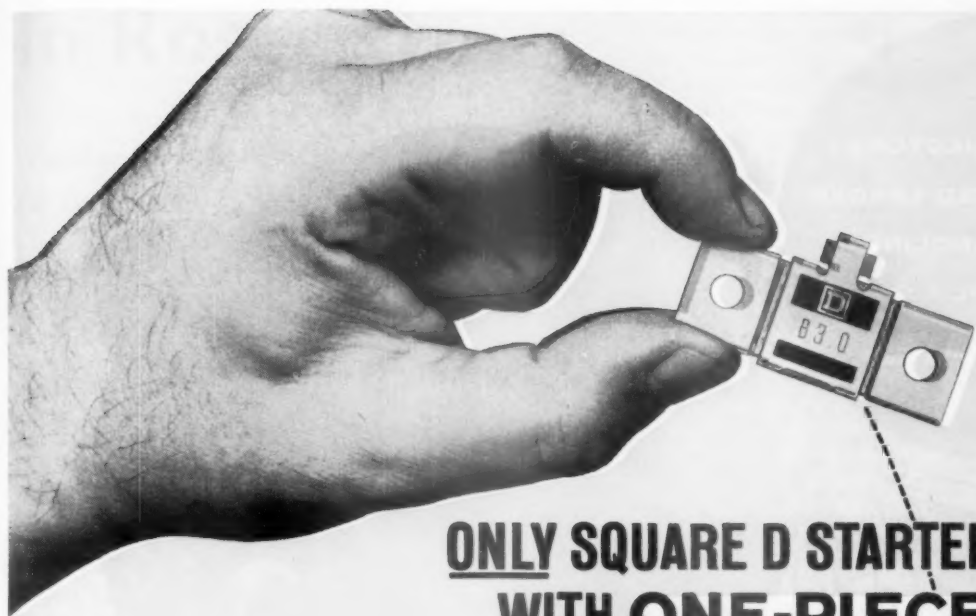
• **Selling Research**—One substitute commodity the company can hope to sell is research itself. It can do this by peddling research proposals to federal agencies; after negotiations, the government picks up part of the tab.

Sale of research ideas can be tough work, though. People in Air Force Research, the Office of Naval Research, or the National Science Foundation can be hard to convince. And Chance Vought, Navy-oriented for so long, does not have many good contacts in other services.

But, says Detweiler, it's a matter of dogged plodding. Chance Vought is "beating its brains out" making presentations to all the services; in 1959, it doubled its 1958 presentations to the Air Force. He feels CV is making progress—the new setup "puts us in a position to claim certain proprietary fields of know-how."

• **Industry Shift**—Vice-Pres. Ray C. Blaylock, in charge of the Research, Astronautics, Electronics, and Range Systems Divs., thinks the whole aircraft industry will have to undergo the same research metamorphosis as CV. The industry's future, he maintains, will depend more and more on non-aircraft developments, created by heavy basic research expenditures.

Already, Chance Vought has one cushion against a recurrence of the 1958 catastrophe—what's left of its \$210-million backlog of contracts is not geared to any weapons system. For the future, Detweiler and his staff look for space activities to provide as much as half of CV's military income—maybe in 5 years, maybe in 10. When it comes, Chance Vought should be in a position never again to be staggered by defense cancellations. **END**



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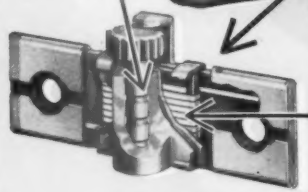
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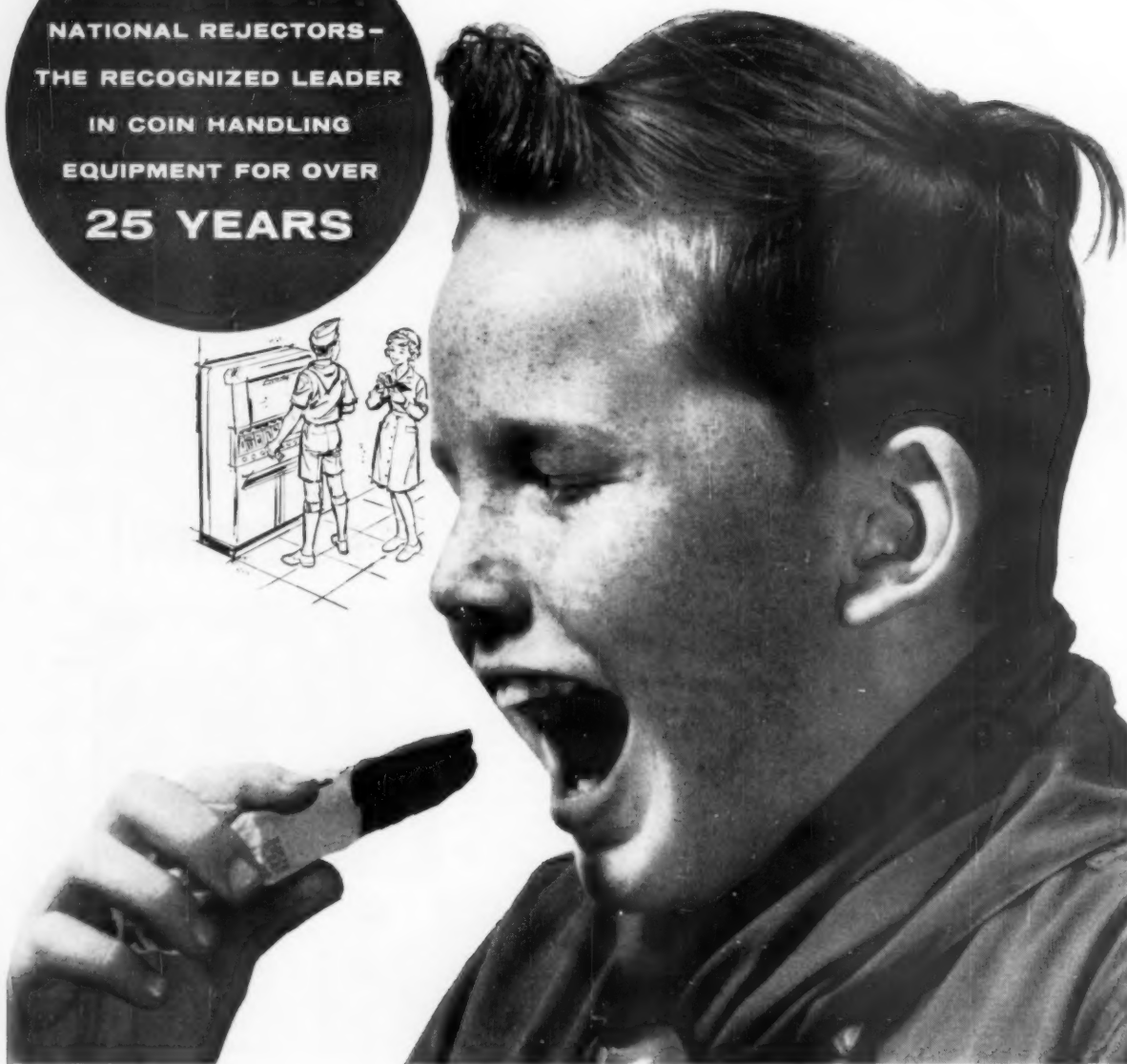
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In Research

• • •

Weather Bureau Plans Better Utilization Of Data Relayed to Earth by Tiros II

When the nation's second weather-eye satellite, Tiros II, is launched this fall, the Weather Bureau will be better prepared to use the information it receives than in the case of Tiros I. The bureau plans to feed Tiros II's cloud cover pictures directly into the National Meteorological Center at Suitland, Md., on a top priority basis. There, the satellite information will be mixed with the bureau's conventional worldwide collection network in the preparation of final weather forecasts.

The National Aeronautics & Space Administration launched its Tiros I satellite last Apr. 1. Scientists were more concerned with it as a research vehicle than with the possibility of using the information Tiros was able to pick up and relay back. Tiros I, however, functioned so well that soon after its cameras started taking pictures for storage and transmittal back to earth stations, its potential as a means of weather forecasting began to make itself clear (BW—Apr. 9'60, p126).

The Air Force's Weather Service also was so impressed by the performance of Tiros that it is arranging to feed Tiros II information into its own weather prediction system. Both the Air Force and the Weather Bureau will have to reshape their communications network in order to get and use Tiros II information within about two hours after it has been collected.

If plans go as expected, the launching of Tiros II will be followed by the launching of Tiros III early in 1961. Then, starting in the summer of 1961, NASA will shift its launching site from Cape Canaveral to the new Pacific missile range in southern California, and also will switch to a bigger, better-equipped weather satellite, the Nimbus. A series of six to eight Nimbus satellites will be launched into polar orbit to take and relay weather photos.

• • •

Rocket Engine for Space Developed That Can Be Turned Off and On

In laboratory tests at the Arnold Engineering Development Center, Tullahoma, Tenn., it appears that scientists have solved one of the most ticklish problems involved in space research—the development of a rocket engine that can be turned off and on at will.

Engineers of Bell Aerospace Corp. developed the engine under contract with Lockheed's Missile & Space Div. In all high-altitude tests so far, the engine has fired, shut off, and then re-ignited successfully. Even in near-vacuum conditions, it seems to behave perfectly.

Re-start capability would make it possible for a satellite in orbit to re-use its final stage engine for return to earth or to change its orbit. It would eliminate the need for the multi-staging of missiles and the resultant penalty in increased weight and complex control systems. It would

make liquid-fueled missiles and space rockets many times as reliable as they are today.

In the case of space exploration, the availability of a final stage engine that could be turned off and then restarted in near-vacuum conditions is particularly valuable. A much simpler, lighter over-all vehicle can be designed if the same upper stage can be counted on to accomplish all desired maneuvers.

• • •

World's Most Powerful Magnet To Be Built for Lab at MIT

Construction of the world's most powerful magnet will start next year at Massachusetts Institute of Technology, as part of a new \$9.5-million research facility called the MIT Magnet Laboratory. The Air Research & Development Command has underwritten most of the cost of the 250,000-gauss magnet, whose capacity will be 500,000 times stronger than the earth's magnetic field.

The magnet is designed chiefly for such basic research jobs as studying the properties and behavior of atoms in solids as well as in liquids and gases. It will also be useful in more immediate practical applications, such as cryogenics—low-temperature research. Other uses are seen in advanced work on nuclear physics and on plasma (the fourth state of matter). Scientists have long been clamoring for stronger magnets for use in research in these two fields.

Primary responsibility for design and construction of the new lab has been assumed by Prof. Francis Bitter, a pioneer in the development of magnets and in high-field magnetic studies. He is associate dean of MIT's School of Science.

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New Theory on Rusting Blames Hydrogen Ions for Starting the Trouble

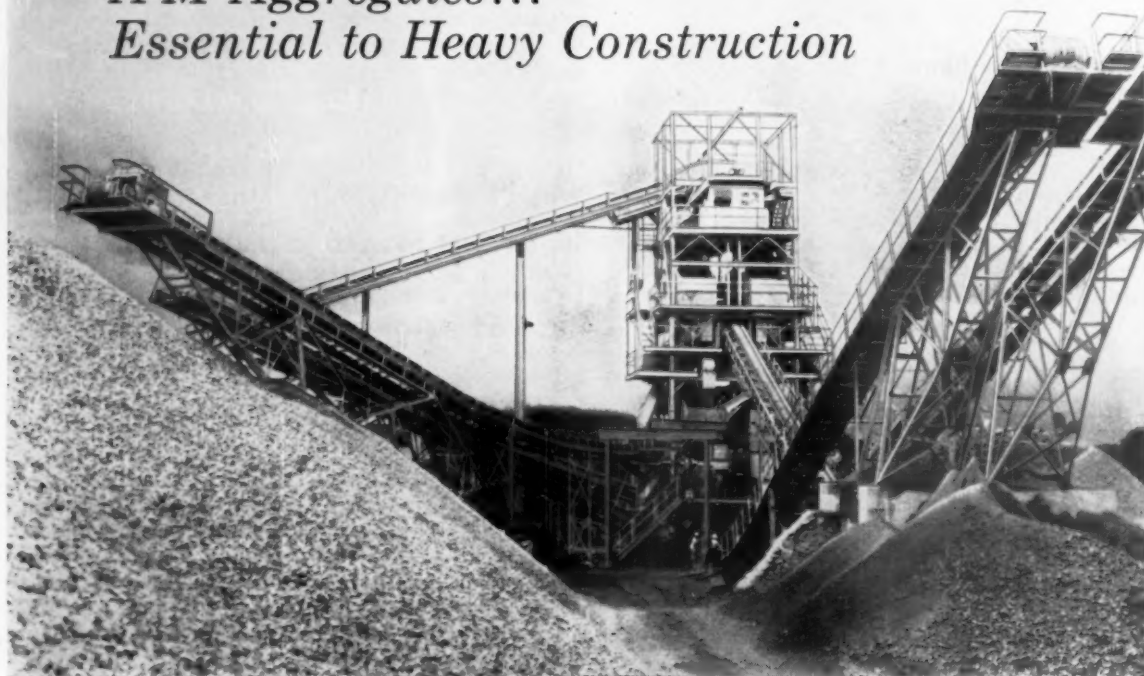
A theory that hydrogen ions in water are the root cause of corrosion was unveiled this week by Westinghouse Electric's research labs in Pittsburgh.

Corrosion—just a slightly longer word for rusting—is one of industry's costliest problems, rendering useless an estimated \$6-billion to \$7-billion worth of metal every year. The search for new ways to thwart rusting goes on ceaselessly (BW—Mar. 22'58, p96), but very little progress has been made on finding its fundamental causes.

Through the years, the favored explanation has been that the process is somehow electrochemical. It has been suggested that water vapor in some manner bridges the gaps between molecules of slightly differing electric potential. The theory has been that the flow of current between the molecules causes corrosion. No one has explained why some metals corrode and others do not.

Now the Westinghouse people suggest that the hydrogen ions—atoms that have lost one electron—punch tiny pitholes in the metal. Then, they theorize, oxygen from the water gets into the pitholes and rusting begins. Because some metals are more resistant to pitting by the hydrogen ions, the researchers figure that they are less susceptible to rust.

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Teaching the B-Schools Math

While most of their scholarly colleagues bask in summer leisure, 41 professors from the nation's business schools remain chained to their desks at Harvard, grinding out solutions to mathematical problems like the one at the right. They are sweating out the last two months of a year-long Ford Foundation program to help universities catch up with the latest applications of mathematics to a wide variety of business chores.

Once their cram year is ended, the 41 advanced students will leave the Institute of Basic Mathematics for Application to Business to spread the gospel at their home schools. The gospel—more math in business schools—will be warmly welcomed by the deans of their schools, according to what a lot of them told BUSINESS WEEK reporters.

Most business schools—like many companies—are eager to keep on top of the latest business methods employing advanced mathematics. They want their teachers equipped to give students a working knowledge of operations research, business games, and all the mathematical methods that can be applied to such fields as marketing, control of inventory, and replacement of equipment.

• **Catalysts**—The graduates of the institute at Harvard should play a big part in expanding such work. Few of them are mathematicians, but their position and new training should help them to infuse more math into courses ranging from accounting to personnel.

Indeed, the deans who sent them to the institute are cooking up uses for their new knowledge even before the course is ended. The year's work has been tough, but a lot of the students are likely to find the work load even tougher when they return to their old jobs. For at least one of them the prospect looks grim: "We plan to use this guy until he drops dead," said Associate Dean James W. Kelley of the Boston University College of Business Administration.

Fatal or not, the work piled up for the returning institute students will fall into three main divisions:

New Courses. Several schools have already scheduled new courses for this fall. Massachusetts Institute of Technology will set up one on new mathematical approaches to accounting. At Minnesota, the returning professor is to build a program around the use of math in business decisions. Boston University freshmen will get a new course in the fundamentals of math. Other schools are planning to give their

men more time to develop courses, or else intend to use them mainly to increase the mathematical content of existing business courses with such items as the theory of probability in inventory control.

Faculty Seminars. The returning missionaries will get together with their colleagues to pass on the latest data in the field, touching on such topics as information theory, the programming of manufacturing operations, and the utilization of personnel. Seminars of this sort have already been planned at New York University, Stanford, Michigan State, and Notre Dame.

Work as Consultants. Most of the schools are already planning to use their returnees to coach both faculty members and graduate students in the use of mathematical tools in their research.

The new chores to be performed by the returning professors will give a considerable push to an interest that has been cropping up in the schools for several years. And it should help to plug some of the holes in business education that were cited last fall in reports on the B-Schools by the Ford Foundation and the Carnegie Corp. (BW—Oct. 31 '59, p84).

Even while the Ford and Carnegie reports were being written, many of the schools were examining their math programs. Some—Columbia's Graduate School of Business was one (BW—Jul. 18 '59, p112)—thoroughly overhauled their setups. At Columbia, the graduate business student must now spend a full fourth of his two-year course doing work in the quantitative tools of management.

• **Work in Progress**—Other schools are still working on extensive changes. At Pennsylvania, the Wharton School of Finance & Commerce last fall introduced the first math course to its graduate division, as a starter for a major reevaluation. For the undergraduate division, faculty committees have recommended stepped-up math requirements in a new program that will go into effect in the fall of 1961. As a byproduct, this will increase the amount of math that can be used in other courses.

Schools that have not felt the need for major overhaul have nonetheless tried a gradual infiltration of their courses by math. Two years ago, the University of California added calculus to the entrance requirements of its business school. Next year, Michigan State is doubling math requirements for an undergraduate business degree. Northwestern and some others feel the best move is adding some math to existing

Prob: P 79

Probability Problem

Let \tilde{p} and \tilde{r} be two random variables with the following probability structure:

a) The conditional p.m.f. of \tilde{r} given $\tilde{p} = p$ is binomial with parameters n and p , i.e.

$$P(\tilde{r} = r | \tilde{p} = p) = f_b(r | n, p) = \binom{n}{r} p^r (1-p)^{n-r} \dots$$

b) The marginal p.m.f. of \tilde{p} is non-specified.

Show:

$$1. E\left(\frac{\tilde{r}}{n}\right) = E(\tilde{p}).$$

$$2. \text{Hint: Consider } E\left\{E\left(\frac{\tilde{r}}{n} \middle| \tilde{p}\right)\right\}$$

2. The r.v.'s $\left(\frac{\tilde{r}}{n} - \tilde{p}\right)$ and \tilde{p} are uncorrelated.

Hint: What is $E\left(\frac{\tilde{r}}{n} - \tilde{p} \middle| \tilde{p} = p\right)$?

3. The r.v.'s $\left(\frac{\tilde{r}}{n} - \tilde{p}\right)$ and \tilde{p} are dependent.

$$\text{Hint: Note that } V\left(\frac{\tilde{r}}{n} - \tilde{p} \middle| \tilde{p} = p\right) = \frac{p(1-p)}{n}.$$

$$4. \text{Show } V\left(\frac{\tilde{r}}{n} - \tilde{p}\right) = \frac{\bar{p}(1-\bar{p})}{n} - \frac{V(\tilde{p})}{n}.$$

$$\text{Hint: } V\left(\frac{\tilde{r}}{n} - \tilde{p}\right) = E\left\{\left[\left(\frac{\tilde{r}}{n} - \tilde{p}\right)^2\right]\right\} = E\left\{E\left[\left(\frac{\tilde{r}}{n} - \tilde{p}\right)^2 \middle| \tilde{p}\right]\right\} = E\left\{\frac{\bar{p}(1-\bar{p})}{n}\right\} = \dots$$

$$\text{etc.}$$

$$5. \text{Show } V\left(\frac{\tilde{r}}{n}\right) = V\left(\frac{\tilde{r}}{n} - \tilde{p}\right) + V(\tilde{p}).$$

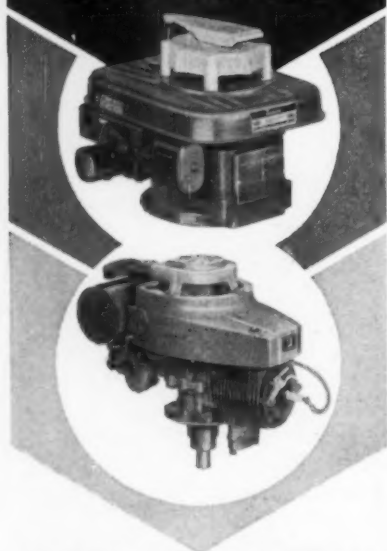
Hint: Observe that $\frac{\tilde{r}}{n} = \left(\frac{\tilde{r}}{n} - \tilde{p}\right) + \tilde{p}$ and use part 2.

$$6. \text{Show } V\left(\frac{\tilde{r}}{n}\right) = \frac{\bar{p}(1-\bar{p})}{n} + \frac{n-1}{n} V(\tilde{p})$$

where $\bar{p} = E(\tilde{p})$.

7. Verify parts 1 and 6 with the data of Problem 78.

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courses, and encouraging both faculty and students to do more basic research in the business applications of mathematics.

Finally, almost all the business schools are offering more specialized courses in such business tools as simulation and operations research. Many of the returnees from Harvard will take a hand in these courses.

• **Middlemen**—Apart from their manifold other jobs, the professors now at Harvard are expected to serve as middlemen between pure mathematicians and that majority of business school professors who have only a nodding acquaintance with the more esoteric numerical arts.

William T. Jerome III, dean of the Syracuse College of Business Administration, hopes his man will be able to "strike a balance" between those who shun the new mathematical tools and those who "try to run business by the numbers." He thinks the year at the institute will enable the teacher of business to command the respect of the math specialists.

The handful of business schools that have done no charting yet in the new directions expect things to start popping when their representatives get back from the institute. The dean of Emory's Business School says "new vistas have opened" for his man, who is expected to introduce many mathematical techniques, with the help of a computer that the school is getting. At Missouri's School of Business and Public Administration, the dean plans to go along with any developments that his returnee may recommend.

• **Was It Too Long?**—Enthusiasm for the year-long course at the institute is

not quite unanimous. The dean of one major business school feels the essential work could have been done in six months—a view emphatically not shared by some of the weary professors doing the studying. The same dean feels that it is foolish for him and his peers to try to evaluate the institute before the course is even finished; "We should observe the results for at least a year."

A few other deans believe that too much time was spent on mathematical theory for a course aimed at business schools. However, the directors of the institute argue that a thorough grounding in math is needed to get the most out of the new techniques. Without such grounding, they say, practitioners might expect impossible results and misinterpret what they did find.

• **Pearls of Great Price**—There were critics who found the institute offered too much, and made their men too valuable. The 41 professors are probably the most sought-after group of teachers in the U.S., says the dean of Denver University, noting ruefully that his man has already received offers from other schools. Another dean, feeling the same pressures, doesn't want to base too many plans on his returnee, lest that worthy be put in a "blackmailing position" when he receives other offers.

Despite these minority gripes, the great majority of the deans already rate the institute as a success and say that they would dispatch other professors to similar year-long programs either in math or other business subjects. But in a parting note of semi-dissent, several deans say that such major programs should not be allowed to overshadow the shorter summer sessions that can be attended by far more teachers.

"On-the-House" Consulting Service

SKF Industries' organized program provides free advice to distributors on every phase of business problems, from personnel recruiting to insurance buying.

SKF Industries, Inc., big Philadelphia manufacturer of ball bearings, is going into the consulting business. For nearly 300 "clients," SKF will provide advice on just about every phase of business activity—from insurance and taxes to recruiting and publicity. But every bit of the advice will be free.

The clients will be the distributors of SKF bearings. Under a new program, they will have access to the entire range of SKF's staff services. Any distributor with a problem can call David Eden, the company's director of distributor relations, who will channel the request to the right SKF expert.

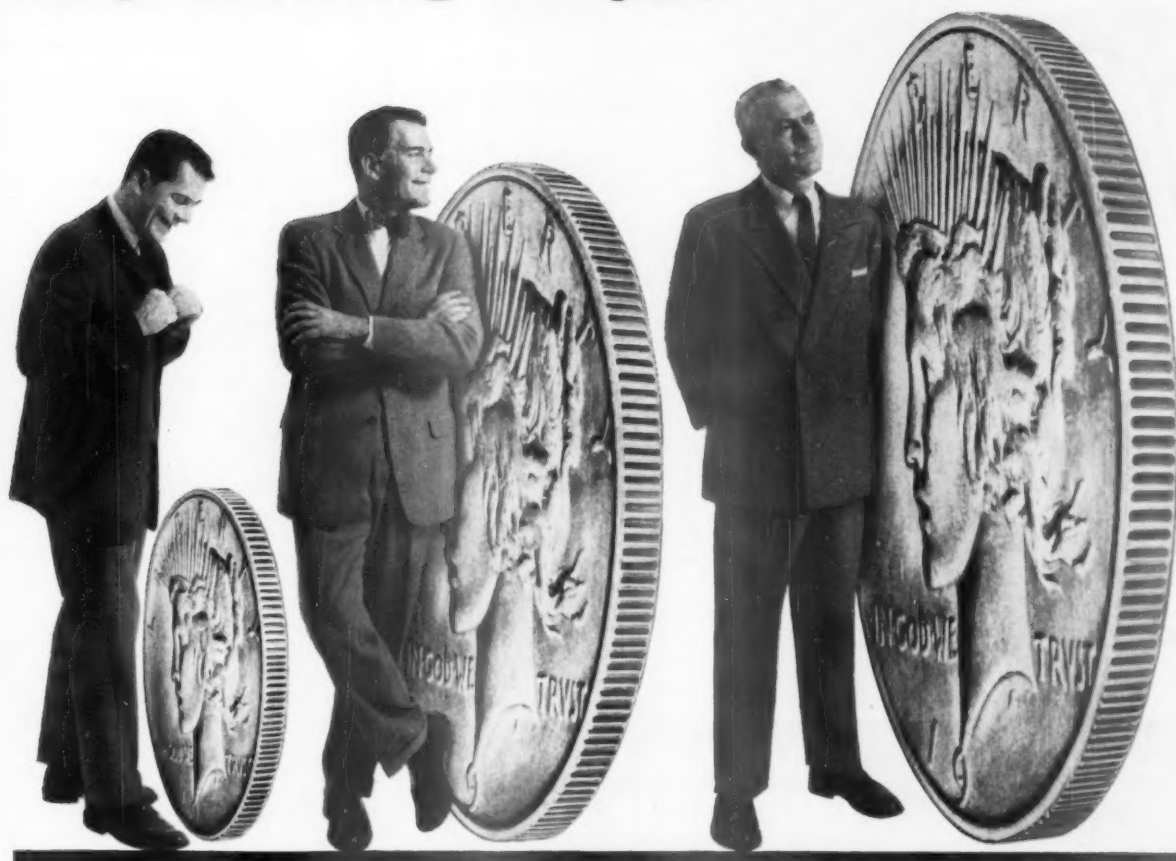
There are no limitations on the offer, SKF says. Its staff members have been

instructed to do any kind of work for distributors that they would do for SKF's own departments. Distributors' requests, in fact, take precedence over internal ones.

• **New Twists**—Most manufacturers try to maintain close ties with dealers and wholesalers, and many provide special services—especially in such areas as accounting and sales training. But it's unusual, say officials of distributor trade associations, to have a formally organized consulting program. Even more novel is the extent of the services SKF will supply.

Already the company has provided psychological testing service to one distributor. For others, it will write press

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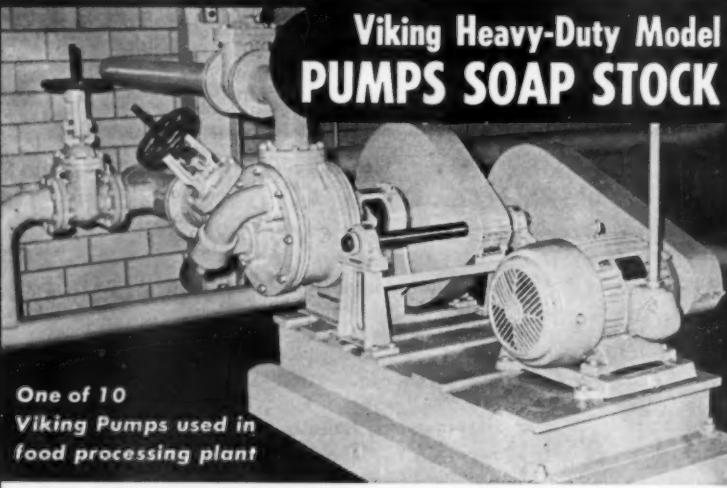
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... the warmer the bond
with SKF, the more likely
the distributors are to fill an
order with SKF bearings ...

(STORY on page 114)

releases, prepare brochures, help find sources of money, and advise on union relations, taxes, insurance problems, and bank dealings.

• **Campaign Pitch**—The plan is part of a series of moves by SKF to get closer to its distributors. Most of them handle several competing brands of bearings and usually, SKF believes, they can select the brand to fill an order. The company reasons that the warmer the bond with SKF, the more likely the distributors are to fill an order with SKF bearings. Distributor sales are not only an important hunk of the company's total (the rest of the business comes from original equipment manufacturers) but are the most profitable part.

That's why SKF launched a new distributor relations program about 2½ years ago. It set up a council of eight distributors who meet quarterly to bring complaints to SKF management and to hear about new products, policies, and promotion plans. It appointed Eden director of distributor relations. It established new programs of distributor salesman training and distributor-oriented advertising. And it launched a campaign to give its stronger outlets exclusive territories and weed out the weaker ones; 150 distributors were dropped in 1959.

• **Filling a Gap**—The consulting service is the latest and most ambitious step. Although it, too, is an arm of SKF's sales efforts, the idea originated with Thomas F. Morris, vice-president for industrial relation, in the course of his management training activities.

Morris conducts monthly management seminars for all the company's middle managers. At each session, two men discuss their jobs. When Eden's turn came up, he told about the troubles he was having in improving relations with the distributors. Morris was interested. Later he went along when a group of the middle managers—at Eden's suggestion—called on the company's Philadelphia distributor to discuss his problems.

That's when Morris hit on the staff services plan—"It's just like filling in a gap for them," he says. He admits there was "some wonderment" on the part of the rest of the company's brass when he presented the idea, but he did get the go-ahead.

The plan was unveiled to the members of the distributors' council at their quarterly meeting at the Great Oaks



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... one distributor feels it is a choice way of cementing goodwill that "will come back to them sponge cake."

(STORY on page 114)

Yacht Club in Maryland. They were so enthusiastic that a scheduled hour session stretched to 4½ hours. Now the other distributors are being notified. SKF vice-presidents are taping speeches about what services their divisions can offer; the tapes will be sent to each distributor.

• **Example**—Here's how one distributor has already taken advantage of the new plan:

Squier, Schilling & Skiff Div. of Alban Corp. wanted help with its employment procedures. Its president, Howard Begg, sent Morris its application form and asked for his criticism. Morris replied, "While we believe it is better than many we have seen, we do not feel it is as comprehensive as it should be." He also sent a copy of SKF's recruitment and selection manual.

Begg liked SKF's forms. Morris sent him a supply—one set for sales and executive personnel, another for other workers—with the Squier, Schilling & Skiff name imprinted instead of SKF's. Then he reviewed reports SS&S was getting on prospective employees from an outside psychological testing organization (at \$50 each) and suggested SKF could provide the same kind of reports free.

Morris and Begg finally decided that SS&S would have candidates fill out the SKF forms and take tests provided by SKF. SKF would then score the tests, check the applicant's references and past employers, and give Squier, Schilling & Skiff a written report on each candidate.

• **Money Well Spent**—If all this increases SKF's staff work load too much, it will hire more people. So far, SKF hasn't estimated the number of requests for help it expects—or the cost. Whatever it costs, the company says, will be listed as "sales expense" and considered money well spent.

Is there any danger in SKF's becoming too intimately involved in a distributor's business? Morris doesn't think so, nor does Howard Begg. "I don't see it as any attempt by SKF to dominate their distributors," Begg says. "After all, you don't have to make use of these services if you don't want to." But he feels it is a choice way of cementing goodwill. Remembering the expression about bread cast upon the waters, Begg feels sure the new SKF program "will come back to them sponge cake." **END**



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Why Growth Is a Campaign Issue

The rate of growth of the U.S. economy has emerged from the learned economic journals (BW—Jan. 23 '60, p. 52) to become one of the major issues in the coming election.

Sen. John F. Kennedy and the Democrats have come out flatly for a growth rate of at least 5%; their party platform states: "We Democrats believe that our economy can and must grow at an average rate of 5% annually, almost twice as fast as our average annual rate since 1953."

Though Gov. Nelson A. Rockefeller is not officially a Presidential candidate but only the would-be beneficiary of a Republican draft, he, too, has committed himself to at least a 5% growth rate—or better yet, a 6% rate, which he thinks is feasible.

Vice-Pres. Richard Nixon has refused to specify the growth rate that he favors—evidencing a sophistication that may be more appropriate to a professional statistician than to a candidate for office. In the circumstances, his wariness, however justified on technical grounds, may have been a tactical mistake. His opponents have leaped on the term "growthmanship"—which he applied to those who, he believes, play a numbers game with growth statistics—to try to prove that Nixon is antigrowth.

If this were so, it would indeed be a serious charge against Nixon. But it isn't so. His "growthmanship" speech—delivered before the U. S. Junior Chamber of Commerce on June 21—is perfectly explicit on the importance of growth as a means of "widening opportunity for all of our citizens" and as a means of staving off the Communist challenge. But the growth issue, said Nixon, is not one of ends but of means. More specifically, the central question is the role of government in stimulating economic activity.

Here, in fact, is the real issue which the coming campaign can either clarify or muddy. This issue takes one into many subjects that have not hitherto been thought of as "growth" questions—monetary policy, agriculture, education, natural resources, transportation, depressed areas, world trade.

But the central issue in the growth debate is certain to revolve about the national budget and tax structure. That is where the real issue between Democrats and Republicans will be joined.

There is already widespread agreement among both conservative and liberal economists (page 25) that our present tax structure is one of the most serious drags on national growth. At our present level of government spending, our tax structure would throw off a surplus of at least \$7-billion—if we were to run at full employment. But partly because the tax burden is so heavy we don't run at full employment. Hence our growth rate sags and our budget surpluses don't show up. Recessions, in fact,

come along with enough frequency to produce major downslides in revenues—and huge deficits in the budget. But that growth in the debt hits the Treasury after the recession is over—too late to provide much contra-cyclical support for business, but just in time to put heavy pressure on the money markets, shove up interest rates, slow down the recovery.

Public vs. Private

The Democrats propose to solve the problem of slow growth by increasing government expenditures for important national purposes—defense, health, education, urban redevelopment, science, and research. They stand prepared to raise taxes if necessary, but suggest that, if they can just get growth up to a 5% annual rate, revenues will be great enough so that the public jobs can be done without an increase in taxes. To fight recessions, the Democrats say, they might increase public works or put through "temporary tax cuts."

Nixon and the Republicans, clearly, would prefer to get growth primarily through the expansion of the private sector—and this would mean a heavier emphasis on tax reduction, as a growth stimulant. But Nixon has deliberately steered away from taking an ideological anti-government line. "If we are to grow at a maximum rate," he has said, "we must recognize the continuing need for investment in the public sector—in our public education establishment, in our nation's transportation system, in the renewal of our run-down urban areas, in the development of our natural and human resources, in providing imaginative new leadership for the exciting scientific and technological revolution. . . ."

And, hanging over Republicans as well as Democrats is the great budgetary unknown that's largely beyond our control: the aggressive maneuvers of the Communists, which may force us to spend much more on defense before the protracted war is over.

The budget-fiscal-growth policies of the Republicans and the Democrats thus complexly overlap to a degree—but not so much that they can't be differentiated: The Democrats are predisposed to rely more upon government programs, the Republicans upon the private economy.

What the nation deserves from both parties, after the hoopla of the election period is over, is:

- A tough and fair appraisal of public needs.
- The readiness to shove taxes down, if the re-appraisal of government needs shows that they will not sop up all the extra revenue that full-employment growth would yield.
- A determined effort to make the tax system more flexible and more equitable.

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